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REPORT
OF THE
Montana Live Stock
Sanitary Board
AND
State Veterinary Surgeon

INCLUDING ORDERS OF THE LIVESTOCK SANITARY
BOARD AND CIRCULAR LETTERS ISSUED BY
THE STATE VETERINARY SURGEON AND
SUMMARY OF WORK OF LIVESTOCK
SANITARY BOARD.

FOR YEARS
1917-1918



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MONTANA LIVESTOCK SANITARY BOARD

J. H. BURKE, Chairman, Hogan, Montana
DAN J. DONOHUE, M. D., Vice-Chairman, Butte, Montana
*W. J. BUTLER, D. V. S., Secretary, Helena, Montana

State Veterinary Surgeon

*DR. W. J. BUTLER

Chief Deputy State Veterinary Surgeon

DR. E. D. NASH

District Deputy State Veterinary Surgeons to Livestock Sanitary Board

DR. C. A. HATTERSCHEID	Glendive	In Charge	Dist Nos. 1 and 3
DR. O. J. JOHNSON	Miles City	Dec-a-sed	District No. 2
DR. N. B. SMITH	Billings	In Charge	District No. 4
DR. H. F. WILKINS	Lewistown	In Charge	District No. 5
*DR. J. W. RICHARDSON	Malta	In Charge	District No. 6
DR. E. D. NASH	Helena	In Charge	District No. 7
DR. N. T. GUNN	Butte	In Charge	District No. 8
*DR. C. H. WIGHT	Great Falls	Resigned	District No. 9
DR. J. C. BOYD	Helena	Special Deputy on Tuber'n Testing	

District Sheep Inspectors

JOHN C. TAYLOR, Bynum, Montana
FRANK P. MADDEN, Dillon, Montana

Resident Deputy State Veterinary Surgeons

- *Dr. G. R. Bach, Medicine Lake
- *Dr. H. L. Brawner, Livingston
- Dr. A. H. Cheney, Polson
- Dr. F. N. Frisch, Glasgow
- Dr. O. L. DeVore, Bozeman
- Dr. F. S. Gray, Miles City
- Dr. W. H. Gahagan, Worden
- Dr. W. J. Hartman, Bozeman
- *Dr. L. G. Helterline, Plains
- Dr. F. T. Hull, Conrad
- *Dr. M. E. Knowles, Helena
- Dr. A. D. Knowles, Missoula
- Dr. A. T. Knowles, Billings
- Dr. V. W. Knowles, Livingston
- Dr. J. H. Knox, Great Falls
- Dr. C. F. Leslie, Kalispell
- Dr. W. A. Lyon, Harlem
- Dr. Fred Moran, Choteau
- Dr. A. H. Mehn, Harlowton
- Dr. C. E. Mock, Rvgate
- *Dr. E. S. Mohr, Plentywood
- *Dr. A. C. Morrow, Dillon
- *Dr. J. F. Mitchell, Anaconda
- *Dr. F. M. Nelson, Columbus
- Dr. W. D. Newton, Ringling
- Dr. C. T. Norman, Belgrade
- Dr. George Norris, Anaconda
- Dr. L. A. Nutting, Great Falls
- Dr. W. C. Orr, Red Rock
- *Dr. M. B. Purdy, Choteau
- Dr. F. B. Remer, Stanford
- Dr. E. A. Rein, Lewistown
- Dr. J. N. Reynolds, Columbia Falls
- *Dr. E. H. Riley, Bozeman
- Dr. H. M. Schultz, Lewistown
- *Dr. L. P. Sharp, Moore
- Dr. C. E. Stineburg, Chinook
- Dr. C. H. Stevens, Stevensville
- Dr. G. E. Thomas, Baker
- Dr. R. C. Timmons, Havre
- *Dr. G. L. Utley, Twin Bridges
- Dr. I. W. Vinsel, Plevna
- Dr. Howard Welch, Bozeman
- *Dr. C. H. Wight, White Sul. Spgs.
- Dr. J. D. Wipf, Belgrade

Clerks

*Fred Motz, Jr.
Resigned

Catharine Calk

Olive Holloway

Frances Wilson
Resigned

* Serving in the United States Army.

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REPORT OF LIVESTOCK SANITARY BOARD

Helena, Montana, December 1, 1918.

Hon. S. V. Stewart,

Governor of the State of Montana,

Helena, Montana.

Sir:

In compliance with Chapter 157, Session Laws of 1917, we beg to present to you the biennial report of the Livestock Sanitary Board and the State Veterinary Surgeon for the years 1917 and 1918.

On April 16, 1917, a meeting of the Montana Livestock Sanitary Board was held in the office of the State Veterinary Surgeon, Capitol Building, Helena, at 10:30 A. M. This meeting was held in compliance with Chapter 157, Session Laws of 1917, which law codified all previous laws and was passed by the Fifteenth Legislative Assembly to take effect on April 15, 1917. All existing orders promulgated by and all regulations adopted by the old Sanitary Board and the old Board of Sheep Commissioners relative to livestock sanitation were approved and adopted by the new Sanitary Board, and were ordered to be continued in full force and effect. At this meeting, Order No. 25 was approved and adopted, as well as pending business and new business disposed of. A special meeting of the Livestock Sanitary Board was held in the office of the State Veterinary Surgeon at Helena at 1:30 P. M. on July 5, 1917. Special business relating to tuberculosis in cattle and dourine in horses was disposed of; also Orders Nos. 26, 27, 28, 29, 30, 30B and 31 were approved and adopted.

A regular meeting of the Livestock Sanitary Board was held in the office of the State Veterinary Surgeon at Helena at 2 P. M. on May 27, 1918. At this meeting pending business was disposed of; also Orders Nos. 32 and 33 and Amendments 1 and 2 to Order No. 25 were approved and adopted. A special meeting of the Livestock Sanitary Board was held at the office of the State Veterinary Surgeon, at Helena, September 11, 1918. Special business pertaining to the inspection of imported sheep was disposed of. At this meeting Orders Nos. 34 and 35 were approved and adopted.

The Livestock Sanitary Board presents this biennial report to you, as Governor of the State of Montana, and to stockmen of the State of Montana, with more than ordinary satisfaction. With your more than usual interest in behalf of the livestock industry, and with the assistance and intelligent cooperation of the Fourteenth and Fifteenth Legislative Assemblies, the Livestock Sanitary Board has saved in actual taxation to the stockmen of Montana, in a little over two years, the sum of \$71,602.43. In addition to this, we have built a laboratory building which is second to none in the United States, and which, without question, is the greatest single achievement ever accomplished in behalf of the livestock industry. Furthermore we have placed to the credit of the Livestock Sanitary Board an Emergency Fund of \$25,000, which can only be used when an emergency exists and when the expenditure of moneys out of this fund is authorized by a joint meeting of the Board of Examiners, the Livestock Commission and the Livestock Sanitary Board. These achievements were made possible with your assistance and the action of the Fourteenth Legislative Assembly in reducing the Bounty Fund and providing a certain amount of the Bounty Tax be made payable to the Livestock Sanitary Board Fund.

The stock industry was further protected and expenditures reduced by the action of the Fifteenth Legislative Assembly, with your assistance, in consolidating the various livestock boards, and in codifying various stock laws. The State Veterinary Surgeon had previously made all of the sheep inspections, but the expense of these inspections was paid by the Board of Sheep Commissioners. In consolidating the boards, the work was simplified. The actual appropriation made by the Legislature to run the Livestock Sanitary Board is the same today as it was eleven years ago. All livestock sanitary work has been carried on without a deficiency, even though individual inspections and necessary mileage travelled have been greatly increased. The stockmen have been saved, in addition to the amount stated, a one-half mill tax which previously went to the Board of Sheep Commissioners. This one-half mill was not made payable to this office, and so, therefore, the saving of this money must be placed to the credit of the Livestock Commission.

To you as Governor of the State of Montana, and the Fourteenth and Fifteenth Legislative Assemblies, on behalf of the stockmen of Montana, we desire to express to you our appreciation and thanks for the legislation passed in the interest of stockmen. The present Livestock Sanitary Laws of Montana are very complete. We cannot offer any suggestion with reference to the laws covering the inspection of cattle and horses. On account of changing conditions the sheep industry is naturally changing from time to time. It may be possible that the law covering inspection of imported sheep may require some revision, but at the present time, we are of the opinion that the laws should not be materially changed.

Recommendations.

During the period of the War, we do not desire to confuse legislation or those interested in livestock sanitation. We have no request to make at this time for additional legislation, but that our previous recommendations may not be lost sight of, we beg to repeat the recommendations contained in our biennial report of 1915 and 1916, which so far have not been acted upon:

I. We recommend the establishment of city, county or state centralization plants where milk shall be examined by an official bacteriologist and where milk which does not pass a satisfactory bacteriological examination shall be pastuerized.

II. We recommend the enactment of a statute requiring the pastuerization of all skimmed milk or separator slop from creameries, cheese factories or receiving stations, which is to be used for livestock feeding purposes.

III. We recommend the enactment of a statute requiring the cleaning and disinfecting of all stock cars.

Respectfully submitted,

J. H. BURKE, Chairman.

D. J. DONOHUE, Vice-Chairman.

W. J. BUTLER, Secretary and Executive Officer

REPORT OF STATE VETERINARY SURGEON.

Helena, Montana, December 1, 1918.

The Honorable Livestock Sanitary Board,
Helena, Montana.

Gentlemen:

I herewith present the biennial report of the State Veterinary Surgeon for the years 1917 and 1918, ending November 30, 1918.

During the past two years, this office has inspected and examined 2,281,347 head of livestock. Deputy State Veterinary Surgeons have travelled a total of 230,174 miles in making these inspections. The travel in question was made on foot, skis, horseback, by team, auto and railroad train.

Horses.

Dourine.

During the year 1917, the Livestock Sanitary Board, in conjunction with the United States Bureau of Animal Industry, blood tested 9,435 head of horses for dourine; of this number 340 reacted, a percentage of 3.6 per cent. In 1918, we tested 9,763 head of horses, of which 324 reacted, a percentage of 3.3 per cent. At a casual glance this would appear that dourine had increased since 1915 and 1916. Such is not the case. Most of the reactors of 1917 and 1918 were on the Fort Belknap Indian Reservation and the adjacent ranges. I think we may safely state that dourine is practically, if not entirely, eradicated from eastern Montana, and is in a fair way of being eradicated from the Fort Belknap Indian Reservation and adjacent ranges.

Glanders.

During the year 1917, we mallein tested 1,485 horses and found 79 reactors, a percentage of 5.3 per cent. During 1918, we tested 840 head of horses and found 36 reactors, a percentage of 4.3 per cent.

With reference to glanders, I may state that this disease is practically confined to the range north of the Lewistown district. This is a very difficult district to work on account of the roughness of the country and the existing weather conditions. We have spent considerable time on mallein testing and inspecting horses in that district. We

trust that very few cases of glanders will be reported from that district in the future. With reference to other districts in Montana, I may state that glanders is exceptional and is only reported in rare instances.

Scabies.

In 1917, a small bunch of horses in Fergus County was affected with scabies. All known affected animals were dipped in oil and made a good recovery. In 1918, some horses, which got away and were not dipped, had to be dipped during the summer months of 1918. Evidently some of the untreated horses from Fergus County got over in the Seven Blackfoot country of western Dawson County, so that we were compelled to round up and dip in oil 420 head of horses of that section. Reports furnished this office indicate that the work was accomplished in an efficient manner and that scabies in horses in that district has been eradicated.

Swamp Fever.

With reference to swamp fever, and the many diseases which resemble it very closely, and to parasitic conditions and other diseases in horses, of which we do not know the exact causative agent, I sincerely trust that with the development of our Laboratory we may be able to positively diagnose these conditions.

With regard to the horse industry, we feel that its future is surmounted with difficulties. Undoubtedly, Europe will require many purebred draft animals, but the day of the light weight horse has passed. There is, at this time, practically no market for the light weight horse. We estimate the light weight animals in Montana at about one million head. I believe that each horse will eat or destroy at least five tons of hay each year. This means an annual destruction of at least five million tons of grass and hay. At the present time, the light weight horse is a live liability rather than a live asset to its owner.

We have no desire to advocate the raising of horses as a meat product, but we do, at this time, recommend the use of light weight horses, of which there is no healthier in the world than in Montana, as a food product for the utilization of those desiring a cheaper meat and for the feeding of the European populace after the termination of the War.

Cattle.

Tuberculosis.

In 1917, we tested 13,526 dairy cattle and found 706 reactors, a percentage of 5.2 per cent. In 1918, we tested 19,161 dairy cattle and found 1,006 reactors, a percentage of 5.3 per cent.

The percentage of reactors found is an increase over 1915 and 1916. This is not to be understood that there is an increase of tuberculosis in Montana. There is NOT an increase of tuberculosis. We are simply doing more efficient and thorough work. In the past when we had to rely upon the temperature test, and when a great many of the dairymen, as best they could, evaded the dairy law, all of the cattle were not brought in. A number of the cattle remained out in the hills. Today, we are using the intradermal, or tail test. With this test, we can test unbroken animals just as easy as we can the gentle dairy cattle and dairymen are bringing in all their animals, calves, yearlings and milking cows, from the hills. They realize that it is to their advantage to have the test performed on the young as well as the old animals. Within the next two or three years, provided that our dairymen observe the law, and provided that shippers from outside states do not find a way in which to evade the law and ship in tuberculous animals, we should have very few tuberculous cattle in Montana. It has been our experience that whenever we find reactors today, we can invariably trace that infection to a shipment of eastern cattle.

Accredited Tuberculosis Free Herds.

Since writing our last report, we have in conjunction with the United States Bureau of Animal Industry, established an Accredited Tuberculosis Free Herd list in Montana for purebred cattle. In 1917, the Federal Inspectors tested 255 head of purebred cattle and found one reactor. In 1918, the State and Federal Inspectors tested 4,211 head of purebred cattle and found 161 reactors, a percentage of 3.8 per cent.

We now have eight purebred herds on the Accredited Tuberculosis Free Herds, and ere another year passes, we should have a great many more.

Taking everything into consideration, the results of testing purebred cattle are indeed gratifying.

Foot and Mouth Disease.

There has been no recurrence of foot-and-mouth disease in the State of Montana since 1914, and none in the United States since 1915. We have had a great many calls during the past year relative to a disease which affected the mouths and feet of cattle. Our investigations proved this disease to be mycotic stomatitis, a disease which is caused by a fungus growth on grass. Mycotic stomatitis is not a dangerous disease. It disappears in one or two days if the cattle are removed from the affected grass or hay.

Scabies in Cattle.

All cattle on the Blackfeet Indian Reservation were dipped for scabies this year under Federal supervision. They were not all affected by any means; a small percentage only were diseased, but the Federal authorities thought it best to make a thorough cleaning.

Scabies in cattle was found during the winter months on the Fort Belknap Indian Reservation, and also on ranges adjoining that Indian Reservation. We dipped a number of cattle on state lands, but had to stop dipping operations on account of lack of labor, lack of water and lack of feed. It is to be trusted that the Federal authorities will clean the Fort Belknap Indian Reservation and the state will be in a position this coming year to eradicate the disease from adjacent ranges. No dipping was done on the Fort Belknap Indian Reservation during 1918.

It was also necessary to dip a number of cattle just east of the Hailstone Basin country in Stillwater County. Scabies has appeared from time to time in cattle in that district, but it is to be trusted that the disease has now been eradicated.

Federal authorities discovered scabies in some bulls on the Crow Reservation. All affected and exposed animals were dipped under Federal supervision, and no recurrence of the disease in that district has been reported.

Contagious Abortion.

Contagious abortion continues to be a serious menace to the cattle industry of the United States. We have worked on this disease as best we could. Our experience has taught us to recommend the carbolic acid treatment as outlined in our biennial report of 1915-1916.

Blackleg.

Blackleg continues to be a very serious menace to the stock industry in Montana. It is not to be expected that we can produce a germ-free vaccine a month or so after our laboratory is completed, but if present plans materialize, we will, during the coming year, distribute to the stockmen of Montana, free of charge, or at actual cost, a germ-free aggressin vaccine.

During 1917, we filled 1,666 applications for blackleg vaccine and distributed 146,295 doses of Government attenuated virus vaccine.

During 1918, we filled 1,492 applications and distributed 139,255 doses of Government blackleg attenuated virus vaccine.

Hogs.**Hog Cholera.**

It is pleasing to know that we have had no serious outbreak of hog cholera in Montana during the years 1917 and 1918. We had one or two cases in the vicinity of Billings and also in the vicinity of Butte. The United States Bureau of Animal Industry has detailed a Federal Veterinarian with an office in Helena to cooperate with this Department in the handling of hog diseases.

Hairless Pigs.

Hairless pigs continue to be a menace to the hog industry in certain sections of Montana. The Experiment Station at Bozeman has handled this trouble and has issued a pamphlet relative to the cause of this disease, and has recommended the feeding of potassium iodate as a preventive.

Sheep.**Scabies.**

It is with more than an ordinary sense of satisfaction that I advise you that at this time scabies in sheep does not exist in Montana. Sheep scabies, I am informed, exists in every state which surrounds Montana. We are advised that in some of the states to the south of us the disease is more prevalent this year than it has been in many years past.

This is one of the most trying diseases to handle, and one of the hardest to eradicate.

We respectfully recommend to our sheepmen that they exercise every precaution, and cooperate with this office in every way when importing sheep.

Lip and Leg Ulceration.

Lip and leg ulceration continues, in certain sections, to be a source of trouble during the winter months. In our reports issued from time to time, this disease has been given considerable attention.

We desire to say to the sheepmen that whenever the disease makes its appearance, by writing this office they will get immediate and positive action, and every advice and assistance will be rendered them. The same applies to lung worms in sheep, or any other disease which may give trouble.

Importations.

Importations of livestock during the years 1917 and 1918 fell off, due to existing war conditions as well as natural conditions which have existed in Montana during the past two years.

During the year 1917, we imported:

Horses	25,535
Cattle	40,922
Sheep	9,874
Swine	679

During the year 1918, we imported:

Horses	6,059
Cattle	19,925
Sheep	59,453
Swine	576
Dogs	320
Goats	21

A total of 163,364 animals for the two years.

We desire again to advise the cattle men that the regulations of the Livestock Sanitary Board provide that all purebred cattle shipped into Montana must be subjected to a sixty day tuberculin retest. This test is made free of charge and is for the protection of the stockmen. We have found that a great many imported animals, even though accompanied by a tuberculin test chart, have been tuberculous. Upon retest, we have demonstrated the disease, and in many instances saved the stockmen concerned thousands and thousands of dollars.

Laboratory.

In the report of the Livestock Sanitary Board, the Livestock Sanitary Board Laboratory has been mentioned.

It is very difficult, and it may be impossible, for me at this time to impress upon the stockmen the importance of this Laboratory. It will mean more to the stock industry of Montana than any other one thing ever undertaken for its good. Its effect will not be felt in one year, and probably not for many years, but the good to be accomplished will materialize just as sure as the rising sun.

With reference to the Laboratory, we have been advised that the Board of Directors of the Rockefeller Foundation has agreed, by unanimous vote, to take over a certain part of our Laboratory for research work. This in itself will mean work on many unknown diseases and may mean the solution and prevention of such a scourge as loco. I may state that the Livestock Sanitary Board has effaced itself in this matter, and has turned over a certain part of the Laboratory for the exclusive use of the Rockefeller Foundation whenever the Rockefeller Foundation is in a position to begin its work. The Livestock Sanitary Board and the State Veterinary Surgeon have agreed to turn over their organization and to do everything within their power to assist the Rockefeller Foundation in whatever work it may undertake.

We are also assured that we will obtain the unqualified support of the United States Bureau of Animal Industry in our Laboratory.

With reference to the United States Bureau of Animal Industry, we have requested that they consolidate all of their work in the State of Montana and place it under the direct supervision of one inspector; this inspector to be located at Helena and to be in constant communication with the Livestock Sanitary Board. If this is accomplished, it will be of inestimable value to the stockmen of Montana.

It is very possible that I may be out of the State for some considerable time to come. I have lived with the stockmen of Montana. They have educated me. My heart has ever been with them. For the support they have ever given me and for the many hours I have spent on the open range, I desire to express my appreciation and thanks.

W. J. BUTLER,
State Veterinary Surgeon.

NOTE—These reports written on October 26, 1918, but statistics are compiled to December 1, 1918.

FIELD OFFICE OF UNITED STATES BUREAU OF ANIMAL INDUSTRY ESTABLISHED AT HELENA.

Since the Report of the State Veterinary Surgeon was written, the United States Bureau of Animal Industry has established a field office at Helena, Montana, consolidating all Bureau activities in Montana, comprised of the following projects:

- Sheep scabies eradication.
- Cattle scabies eradication.
- Canadian import and export inspection.
- Tuberculosis eradication.
- Hog cholera control and eradication.
- Dourine eradication.
- Abortion, influenza, anthrax, blackleg and other field work.

Dr. Rudolph Snyder has been placed at the head of this office, inspector in charge of all field work in Montana, and will work in close cooperation with the Livestock Sanitary Board and State Veterinary Surgeon. The offices of the Bureau will be in the new Laboratory Building. This move on the part of the Bureau of Animal Industry will be of inestimable value to the stockmen of Montana.

CIRCULAR LETTERS TO DEPUTY STATE VETERINARY SURGEONS.

SERIES OF 1917.

Circular Letter No. 1.

Helena, Montana, December 22, 1916.

To All District Deputy State Veterinary Surgeons:

I have studied very carefully the work we have done during the past two years. I have also compared our annual report with those of other states and I feel that the Sanitary Board may feel justly proud of the work accomplished by its deputies.

The credit for this work, accomplished does not belong to any one person. It belongs to the organization as a whole. I want you to realize that point very thoroughly and to realize that the organization is no stronger than its weakest link, or district. In districting Montana, and in placing you in charge of a District, the Sanitary Board placed a great confidence in you and has taken a step contemplated, but not as yet put into action by any other state in the Union. You will therefore see that the proper supervision of your district reflects not only credit upon your own self, but upon the organization as a whole. Be therefore jealous, and zealous, for the reputation of every other district in the state, as well as that of your own. Do not be afraid that someone else will get a little more credit than you. Be always ready to cooperate and assist with the open-heartedness that you would desire if you yourself were in trouble.

Organize your work. Be efficient. And above all things be thorough and conscientious. When you start out on a trip accomplish that which you start out to do. Do not make several trips with the same object in view. I know this may be difficult, but perseverance, energy and patience will overcome most difficulties. When on a trip to a certain locality in your district, make it your object to clean up all work in that district and to gain information relative to the stock industry in that particular section. A careful observance of these necessities will materially reduce your expenses and greatly increase the work accomplished.

Bear constantly in mind that this organization is being watched very closely. Its work is being weighed in the balance, not only by the stockmen of this state, but by sanitarians and stockmen throughout the United States and Canada. On each and every one of you rests a certain responsibility for the future of the veterinary profession. Remember that loyalty with efficient, intelligent work can move mountains and has no limit to what it may achieve.

I wish at this time to thank you on behalf of the Livestock Sanitary Board and on my own behalf for the work which you have accomplished individually and collectively. I also desire to express to you the wish that you may have a most enjoyable Christmas and a very happy and prosperous New Year.

Yours very truly,

W. J. BUTLER,

State Veterinary Surgeon.

Circular Letter No. 2.

Helena, Montana, January 30, 1917.

To All Deputy State Veterinary Surgeons:

I am trying, as best I can, to locate all centers of contagious abortion infection. Please advise me at your earliest convenience the number of cases of contagious abortion that have existed in your locality, giving name of owner, the number affected and the origin of the animals, if you can.

Yours very truly,

W. J. BUTLER,

State Veterinary Surgeon.

Circular Letter No. 3.

Helena, Montana, February 3, 1917.

To All District Deputy State Veterinary Surgeons:

It will be the policy of the Livestock Sanitary Board, in conjunction with the Bureau of Animal Industry, to vaccinate, with blackleg vaccine, all cattle we possibly can during the coming season. Please give this notice to your local stockmen and make arrangements to vaccinate when requested to do so, providing the stockmen bunch their cattle. We only have a certain amount of money and we

cannot make repeated trips. The stockmen will have to furnish all help and livery when livery can be conveniently furnished. This office will furnish the vaccine and the veterinary assistance free of charge. Give the stockmen every assistance and instruct them relative to vaccination and sanitary precautions.

The Bureau of Animal Industry has instructed its veterinarians to inspect all livestock going onto forest reserves. This office is cooperating with them in this work and when federal veterinarians are not available, you will please inspect stock going on forest reserves, reporting to this office on SV Forms 17, as well as on your weekly report.

Yours very truly,
W. J. BUTLER,
State Veterinary Surgeon.

Circular Letter No. 4.

Helena, Montana, February 23, 1917.

To All Deputy State Veterinary Surgeons:

All bills against this Department incurred for the years of 1915 and 1916, up to February 28, 1917, must be in this office not later than February 28, 1917. The appropriation for the years 1915 and 1916 reverts to the General Fund on March 1, 1917, and all bills not presented before that date cannot be paid unless through special deficiency claims introduced at the next general legislative assembly.

Yours very truly,
W. J. BUTLER,
State Veterinary Surgeon.

Circular Letter No. 5.

Helena, Montana, February 26, 1917.

To All District Deputy State Veterinary Surgeons:

By separate mail I have forwarded you Senate Bill No. 133; the codification of the Livestock Sanitary Laws of Montana. Read this bill carefully so that you will have its provisions at your finger ends at all times. It completely covers all sanitary work. To successfully carry on your work, you must necessarily know the law. If there is any-

thing you do not understand, write me as you will be expected to understand every provision. This bill will become a law on April 15, 1917.

Yours very truly,
W. J. BUTLER,
State Veterinary Surgeon.

Circular Letter No. 6.

Helena, Montana, March 13, 1917.

To All Deputy State Veterinary Surgeons:

I am in receipt of the following letter from F. Torrance, Veterinary Director General of Canada:

“Ottawa, Canada, March 3, 1917.

W. J. Butler. State Veterinary Surgeon,
Helena, Montana.

Sir:

In view of the inconvenience and unnecessary delay and expense experienced by importers of stock, owing to State Veterinarians testing horses with mallein and cattle with tuberculin, I have thought it advisable to draw your attention to this matter.

You, will, I have no doubt, appreciate the fact that in formulating regulations governing these importations, which must apply from one end of this country to the other, it is essential, in order that they may be uniform, to deal only with the United States Federal authorities. For this reason, and no other, this Department requires the certificates in the case of mallein testing to be endorsed by a Bureau officer, and in the case of tuberculin testing, to be signed by an officer of that Bureau.

No other certificates are accepted, and individuals who arrive at the boundary with shipments of horses or cattle, with certificates not bearing the Bureau Officer's signature, must either return their animals to point of origin or remain at the boundary for a sufficient period to enable a satisfactory retest to be conducted. In the case of horses, the delay is not quite as serious, as it is often possible to retest them in the course of three weeks, but in the case of cattle it is necessary to allow a period of three months to elapse.

I have, therefore, thought it wise to draw your attention to this matter and to ask you to advise your assistants. I am quite sure that there is no desire on the part of the State Veterinarians or

their deputies to cause any undue inconvenience to stockmen, and the frequency with which these tests are conducted is no doubt due to the fact that the State Veterinarians have not been familiar with these requirements.

I shall be very glad indeed if you will give this Department your assistance and cooperate in the matter.

(Signed) F. TORRANCE,
Veterinary Director General."

Please read this letter carefully, and see that the provisions are carried out in all instances.

Yours very truly,
W. J. BUTLER,
State Veterinary Surgeon.

Circular Letter No. 7.

Helena, Montana, March 30, 1917.

To All District Deputy State Veterinary Surgeons:

There will be a conference meeting of all District Deputies at Helena sometime during the third week of April.

The exact date I will inform you later. You will be expected to attend this meeting, so please arrange your work and make all necessary arrangements to be in Helena for one or two days the latter part of the third week of April.

Have conditions in your locality, the work you have done and the work contemplated or necessary for the coming season well in your mind so that you may be able to give information along these lines.

Yours very truly,
W. J. BUTLER,
State Veterinary Surgeon.

Circular Letter No. 8.

Helena, Montana, April 2, 1917.

To All Deputy State Veterinary Surgeons:

Your country is virtually in a state of war, and, ere this reaches you, may actually be in a state of war. You are a State Officer and a citizen of the United States. Please, therefore, be vigilant; watch carefully for any act which may be detrimental to your country. Report immediately

to this office all information which you may obtain that will help to serve and protect your country from her enemies.

Yours very truly,

W. J. BUTLER,

State Veterinary Surgeon.

Circular Letter No. 9.

Helena, Montana, April 10, 1917.

To All Deputy State Veterinary Surgeons:

In ordering mallein and tuberculin from this office, ALWAYS state the number of c. c. of tuberculin or the number of doses of mallein wanted.

Yours very truly,

W. J. BUTLER,

State Veterinary Surgeon.

Circular Letter No. 10.

Helena, Montana, April 11, 1917.

To All District Deputy State Veterinary Surgeons:

There will be a joint meeting of all District Deputy State Veterinary Surgeons and Stock Inspectors in Helena on Monday, April 23rd. Please arrange your work so that you may be in Helena not later than the morning of April 23rd.

At this meeting, the Governor will be present and also the President and Vice-President of the Livestock Commission, and one or two representative stockmen.

Kindly acknowledge receipt of this letter on the enclosed postal card.

Yours very truly,

W. J. BUTLER,

State Veterinary Surgeon.

Circular Letter No. 11.

Helena, Montana, April 18, 1917.

To All Deputy State Veterinary Surgeons:

Kindly advise me if, in your experience in tuberculin testing cattle with the subcutaneous test, you have ever observed low external temperatures, at zero or twenty to

thirty below zero, inhibiting a rise in temperature in a tuberculous animal.

It will not be necessary for you to answer this letter, if you have not observed such cases.

Yours very truly,

W. J. BUTLER,

State Veterinary Surgeon.

Circular Letter No. 12.

Helena, Montana, May 3, 1917.

To All District Deputy State Veterinary Surgeons:

To conserve our meat supply and protect our industry on account of war conditions, it has been deemed advisable by the Sanitary Board for you to devote as much of your time as possible to vaccinating cattle for blackleg. The testing of cattle for tuberculosis will be, at the present time, classed as secondary work. That is, you will tuberculin test cattle when your other work will permit and always when requested to do so by the owner of cattle, or when you think it distinctly advisable. Make trips out into the country, vaccinate all the cattle you possibly can and instruct the owners and livestock men relative to the necessity of burning carcasses of animals which have died from blackleg. The inspection and testing of interstate shipments should be left as much as possible to resident deputies. The dipping of cattle and sheep for lice and scab will, of course, be work of the first class and must be attended to.

We are in a big war, and the outlook for crop and food production is not of the best, so please grasp the spirit of conservation; do everything you possibly can to educate the stockmen and farmers and assist them in every way possible in protecting and saving their livestock.

We have a new supply of 12 c. c. syringes on hand. Kindly advise me if you need such a syringe and also advise me whether you desire slip needles or screw needles, or both, and how many needles of each you desire.

Yours very truly,

W. J. BUTLER,

State Veterinary Surgeon.

Circular Letter No. 13.

Helena, Montana, May 3, 1917.

To All Veterinarians:

I am informed there is a man working in Montana who claims to be a veterinarian from Kentucky on sick leave after having seen army service on the Border. This person makes the acquaintance of the local veterinarian and through his introduction draws checks and sight drafts, with which he pays his board bills, and drug bills where he has obtained drugs. The checks and sight drafts are always in excess of his bills and invariably are returned marked "No funds".

He is a slender built man, about five feet nine inches in height, 28 to 32 years of age, medium dark complexion, military bearing and talks with more or less of a southern drawl. At Miles City he used the name of "Dr. Ellis".

I would advise you to be on the lookout for this man, and if he presents himself to you, notify your sheriff immediately and have him get in communication with Mr. A. B. Middleton, Sheriff of Custer County, Miles City.

Yours very truly,

W. J. BUTLER,

State Veterinary Surgeon.

Circular Letter No. 14.

Helena, Montana, June 15, 1917.

To All Montana Veterinarians:

Attached is a letter from the United States Department of Agriculture relative to a plan of action under present conditions should an outbreak of foot-and-mouth disease occur. This plan of action will not only apply to foot-and-mouth disease, but will apply in the main to any other dangerous scourge which threatens to destroy our livestock industry.

It is well to bear in mind that during the time of war the enemy might use any and all means for destroying the resources of this country. Distribution of the virus of any highly contagious disease of animals offers a means whereby the livestock of this country might be jeopardized. It is practically impossible to guard against the deliberate introduction of any infections. We must, therefore, increase our vigilance in detecting outbreaks of contagious diseases.

It is your duty to your state and to your country to give especial attention to any unusual animal disorders which may appear in your locality and report immediately such conditions to this office. Foot-and-mouth disease, rinderpest, contagious pleuro pneumonia, surra and, possibly, anthrax, hog cholera and rabies are particularly important to be kept in mind in this connection.

In addition to preventing and eradicating disease in livestock, it is also our duty to give the following our consideration:

1. The conservation of cattle by encouraging farmers to raise a larger number of heifer calves for breeding purposes. This will increase the future production of meat and dairy products and tend to maintain the necessary number of farm animals.
2. Encourage an increase in the number of swine, in order to avoid the losses from disease, advising farmers to consult their veterinarians regarding the prevention of infections, especially hog cholera and tuberculosis.
3. Encourage in every possible way an increase in the production of poultry, and advise farmers to use every means to prevent losses from infectious diseases, such as roup, white diarrhoea, chicken cholera and tuberculosis.
4. It is considered feasible to encourage the introduction throughout dairy districts of a larger number of purebred sires.
5. It is suggested that our meat supply might be increased by the raising of beef animals in localities where the conditions are favorable.
6. It is believed there should be an increased interest in sheep raising throughout the state, and owners are advised to avail themselves of the information obtainable from their veterinarians and State and Federal Departments of Agriculture, regarding measures to prevent losses from parasitic and other diseases.
7. Because of the present inadequate supply of draft horses and the probable shortage after the war, it is advised that measures be taken to increase the breeding of horses for both light and heavy draft purposes.
8. Veterinarians should assist livestock owners in every possible way by aiding them in the prevention of destructive diseases.

This letter and enclosure should be kept on file and studied very carefully. Any or all of it may be used for publication if so desired.

Yours very truly,
W. J. BUTLER,
State Veterinary Surgeon.

Enclosure

(Copy)

UNITED STATES DEPARTMENT OF AGRICULTURE
Proposed Plan of Action under Present Conditions Should
an Outbreak of Foot-and-Mouth Disease Occur.

1. Request the State authorities immediately to quarantine any animals or herds as soon as they are suspected of being affected with foot-and-mouth disease, and to hold these animals and premises under quarantine until a definite diagnosis has been made.
2. Request the State immediately to place guards on the premises when suspicious animals are found and quarantined. A guard will be maintained continuously on all infected premises from the time the disease is discovered until the diagnosis has been proven incorrect or if proven correct, until the premises have been cleaned and disinfected.
3. Confirm the diagnosis. Since infectious vesicular stomatitis has made its appearance in this country, it will require an expert to differentiate by inoculation tests this disease from foot-and-mouth disease. If the disease proves to be foot-and-mouth disease, the plan of procedure would be as follows:
4. Quarantine a sufficient area to include all probable foci of infection. As the foci of infection have been located and the spread of infection brought under control reduce the areas quarantined. The circular zone quarantine will be applied where it is considered practicable to do so and territory will be released as rapidly as conditions warrant it.

5. Request the State authorities to immediately quarantine all infected premises and also sufficient area surrounding the infected herds. When centers of infection are located, urge the State authorities to draw their regulations to correspond with the Federal regulations in regard to extent of territory to be quarantined and the duration of the quarantine.

6. Dispatch representatives of the Department immediately to make arrangements with the State authorities in regard to the details of Federal and State cooperation.

7. Notify by wire the livestock sanitary authorities of all other states and request them to use all their facilities to detect the first appearance of the disease in their respective states.

8. Notify by wire the officials of all railroads tributary to the infected areas and request them to call in for cleaning and disinfection before they are again used all cars that had carried livestock into or out of the infected territory within a definite period preceding the outbreak.

9. Use telegraph in assembling a sufficient number of veterinarians, lay inspectors and other employees of the Department to take charge of the different lines of eradication work.

10. Order by wire equipment sent from the places where it is now stored to the area or areas of operation.

11. Order by wire or telephone disinfectants and any new equipment necessary.

12. Immediately start tracing infected cars.

13. Immediately start tracing probable infected shipments of livestock and ask the states to do likewise.

14. Immediately quarantine all stock yards where the indications are that infection has reached them.

15. Immediately station men at car cleaning stations, at railroad points on the borders of the infected areas, and increase the inspection force in public stock yards.

16. Immediately establish headquarters in the area of operations and others as new areas of infection are discovered.

17. Immediately start tracing the origin of the outbreak.

18. Immediately commence educational work, including meetings, distribution of literature, press articles, etc.

19. Urge owners of infected herds to slaughter under the supervision of inspectors all the animals that they will for their own use and thus conserve all the meat possible.

20. Immediately slaughter all herds found to be affected with the disease. Much has been said about saving purebred herds on farms. Such a policy is considered dangerous.

21. The "Instructions for Employees Engaged in Eradication Food-and-Mouth Disease" give further information in regard to the details of our plan of action for field operations.

22. The expenses shall be shared equally between the Department and the State for:

- (a) Animals destroyed.
- (b) Burial of affected herds.
- (c) Property destroyed in connection with the cleaning and disinfection of infected premises.
- (d) Cleaning and disinfecting infected premises including labor, disinfectants, teaming, pumps and their equipment, and the implements used in cleaning.
- (e) Hiring of guards.
- (f) Office rents.
- (g) Guns and ammunition.

23. The United States Department of Agriculture shall jointly direct the work of eradication in cooperation with the State Livestock Sanitary authorities.

24. Appraisals of affected and exposed animals shall be made by an appraisal board consisting of representatives of the Department, a representative of the State and the owner or his representative.

25. Federal and State officials cooperating in an infected district will carry on their work from the same headquarters in order that they may confer when necessary on matters relating to the work.

Circular Letter No. 15.

Helena, Montana, June 20, 1917.

To All Deputy State Veterinary Surgeons:

I am in receipt of the following regulations from the Livestock Sanitary Board of Nebraska:

"STATE LIVESTOCK SANITARY BOARD OF NEBRASKA.

"Regulations Pertaining to the Admission of Pure
Bred Cattle Into the State of Nebraska.

To Managers of Railroads and Others:

"All Pure Bred Cattle transported or driven
into the State of Nebraska that have originated
from other than Federal or State Officially Ac-

credited Tuberculosis Free Herds, must be moved to destination in quarantine and held under the direction of the State Livestock Sanitary Board for an official tuberculin test, to be applied at owner's expense under the direction of the State Livestock Sanitary Board not less than sixty days after their arrival.

All health certificates accompanying shipments of pure bred cattle must be immediately forwarded to the State Livestock Sanitary Board, Lincoln, Nebraska, upon arrival at destination.

Penalty: Any person violating any of the provisions of the law or any rule or regulation made by the State Livestock Sanitary Board, shall be prosecuted according to law and subjected to such fine and imprisonment or both as is provided by law."

STATE LIVESTOCK SANITARY BOARD.
(Signed) J. H. Bulla, President.

Lincoln, Nebraska,
June 13th, 1917.

ATTEST: J. S. Anderson. Secretary,
and Deputy Veterinarian.

Please read this order carefully and notify prospective shippers of purebred cattle to Nebraska of these regulations.

Yours very truly,

W. J. BUTLER,

State Veterinary Surgeon.

Circular Letter No. 16.

Helena, Montana, June 21, 1917.

To the Breeders of Pure Bred Cattle in Montana:

I am informed by the Bureau of Animal Industry, Washington, D. C., that a veterinary inspector from the Bureau will proceed from Washington about July first to arrange for tuberculin testing of pure bred herds in Montana, so that those desiring their herds placed upon the Accredited Tuberculosis Free List may have their herds tested.

All applications should be filed in this office prior to July first so that the necessary arrangements may be made.

I desire to call your attention to the advisability of having your herds placed on this list. Herds placed upon the Accredited Tuberculosis Free List will be published thruout

the United States and cattle from such herds will be accepted by other states without the necessity of a tuberculin test previous to shipment.

Yours very truly,

W. J. BUTLER,

State Veterinary Surgeon.

Circular Letter No. 17.

Helena, Montana, June 25, 1917.

To All Deputy State Veterinary Surgeons:

I am in receipt of the following regulations from the State Veterinarian of Missouri:

“MISSOURI

Notice of Quarantine Regulations Governing the Shipment of Hogs.

“Quarantine Proclamations were issued June 14, 1917, effective on July 1, 1917.

The First Proclamation governs the shipment of hogs into the State of Missouri from other states.

Registered purebred hogs shipped in crates by express are exempt from inspection. All hogs going to the public livestock markets or to any slaughtering establishment for immediate slaughter are exempt from inspection.

All hogs shipped in livestock or box cars must be immunized against hog cholera. Such hogs must be held not less than 14 days when the serum-virus method is used and not less than 14 days nor more than 30 days when the serum-alone method is used. Before shipment the hogs must be carefully examined and all those showing any physical signs of sickness or any undue elevation of temperature must be rejected. The cars must be cleaned and disinfected.

Inspections may be made by any inspector of the Bureau of Animal Industry or any state or deputy state veterinarian of the state in which the shipment originates or by any competent graduate veterinarian whose certificate of health is approved in writing by the State Veterinarian or like officer.”

The Second Proclamation sets forth rules governing the shipment of hogs from one point to another within the State of Missouri.

“Registered purebred hogs shipped in crates by express and all hogs going to public markets or to

any slaughtering plant for immediate slaughter are exempt from inspection.

Hogs shipped in livestock or box cars must be immunized against hog cholera. They must be held not less than 14 days when the serum-virus method is used, and not less than 14 days nor more than 30 days where the serum-alone method is used. They shall be carefully examined when ready for shipment and all hogs showing any physical signs of sickness or any undue elevation of temperature must be rejected. The cars must be cleaned and disinfected.

Inspections may be made by any deputy state veterinarian or any competent graduate veterinarian whose certificate of health is approved in writing by the State Veterinarian of Missouri.

All State Officials please instruct those who are authorized to make such inspections."

Respectfully,

(Signed) D. F. LUCKEY,
Columbia, Missouri, State Veterinarian."
June 19, 1917.

Please read this order carefully, and see that its provisions are carried out on shipments from Montana.

Yours very truly,

W. J. BUTLER,
State Veterinary Surgeon.

Circular Letter No. 18.

Helena, Montana, June 27, 1917.

To All Deputy State Veterinary Surgeons:

This is to officially notify you that rabies has been found to exist in coyotes and a few head of cattle in the vicinity of Pony, Madison County, Montana.

This disease was first found in a coyote which our investigations lead us to the opinion entered Montana from northeastern Idaho by following the sheep trails either thru Torgee Pass or Reas Pass and thence down the Madison River.

The coyote in question was destroyed, but before being destroyed, it bit five calves and one cow, all of which developed rabies and died. No further infection so far has been discovered.

Hunters have been employed by the Livestock Sanitary Board and the United States Biological Survey and the work of eradicating predatory animals in the infected district is being carried on under the direction of the United States Biological Survey. We are endeavoring to localize and eradicate the disease but such a task, on account of the habits of predatory animals, may be impossible.

Up to the present time, the disease has not been reported in dogs, but the danger of their becoming infected is very imminent. Kindly advise your local Board of Health and City Council relative to this matter and the advisability of the strict enforcement of all dog regulations to assist in preventing the spread of this disease in Montana.

Yours very truly,

W. J. BUTLER,

State Veterinary Surgeon.

Circular Letter No. 19.

Helena, Montana, August 7, 1917.

To District Deputy State Veterinary Surgeons:

Owing to Paul Raftery having been detailed to the Governor's office and the increase of work thrown upon this office, it will be necessary for you to make out S. V. Form 17 for all work performed.

Also, in your weekly reports, total on the back of the sheet the number of miles covered by railroads and also the number of miles covered by auto and other conveyance.

This office is doing a great deal of extra work on account of the war situation, so please assist us by getting in your reports promptly and complete.

Yours very truly,

W. J. BUTLER,

State Veterinary Surgeon.

Circular Letter No. 20.

Helena, Montana, September 21, 1917.

To All District Deputy State Veterinary Surgeons:

If your work will permit, it will be agreeable to the Livestock Sanitary Board for you to come to Helena Wed-

nesday and Thursday, September 26th and 27th, 1917. On your arrival at Helena, please report to the State Veterinary Surgeon's office.

Yours very truly,
W. J. BUTLER,
State Veterinary Surgeon.

Circular Letter No. 21.

Helena, Montana, October 1, 1917.

To All Deputy State Veterinary Surgeons:

The following communication has been received by this office:

“Helena, Montana, September 22, 1917.

“In view of the fact that it has been the custom of the various offices in the building to hold their monthly bills until the last day, before presenting to the State Board of Examiners for approval, at their regular meeting, causing thereby unnecessary hurry in checking and increasing the possibility of mistakes, the following order has been adopted:

ORDER

“All claims against the State of Montana such as expense accounts, bills for supplies, printing, etc., must be in the office of the State Board of Examiners not later than the Thursday immediately preceding the regular meeting held on the third Monday of each month.

Claims not received at this time will be held until the next regular meeting.”

BY ORDER OF THE STATE BOARD OF EXAMINERS.

(Signed) Arthur E. McFatridge, Secretary.”

As all accounts must be checked and approved by this office, it is essential that all expense accounts reach this office **not later than the morning of the Wednesday immediately preceding the third Monday of each month.**

All expense accounts must be itemized: That is, the name of the place where expense was incurred, together with the kind of expense, must be noted. All items of over \$1.50 must be accompanied by a receipt, excepting when personal livery is used. In such cases, the starting point and destination, mileage and elapsed time must be noted. Fifteen cents (15c) per mile is allowed for personal auto. To facilitate

the auditing of expense accounts, each receipt must be numbered and the number of the receipt noted in the first right hand column of the voucher. In the case of resident-deputies, the time consumed in making the inspection, also the name of the person owning the stock inspected or tested must be given.

Yours very truly,

W. J. BUTLER,

State Veterinary Surgeon.

Circular Letter No. 22.

Helena, Montana, November 5, 1917.

To All Deputy State Veterinary Surgeons:

Please read over carefully the South Dakota regulation, which I forwarded you a few days ago. I have received a number of complaints from the South Dakota Livestock Sanitary Board to the effect that their regulations were not being observed by our deputies. No deviation must be made unless upon special permission from the Livestock Sanitary Board, Pierre, South Dakota.

Briefly, I may state in the mallein test, they accept either the ophthalmic or the subcutaneous test. When a tuberculin test is required, the thermal test must be used unless special permission is previously obtained to use the intradermal test.

All horses, mules and asses must be mallein tested and stallions and jacks for sale or breeding purposes must be accompanied by a certificate of soundness. Bulls and female cattle over six months of age must be tuberculin tested. In case of strictly range heifers, they may be shipped to South Dakota on a clinical health certificate; PROVIDED, that permission is previously obtained from the Livestock Sanitary Board at Pierre to ship them into South Dakota without the tuberculin test.

All bucks and purebred sheep must be dipped twice at intervals of ten days within thirty days of shipment unless special permission is issued by the South Dakota authorities permitting the shipment to go forward to destination subject to dipping at destination.

Where permission is obtained to deviate from their regulations, a notation of this fact must be made on the certificate of health or the test chart.

Yours very truly,

W. J. BUTLER,

State Veterinary Surgeon.

Circular Letter No. 23.

Helena, Montana, November 5, 1917.

To All Employees of the Montana Livestock Sanitary Board:

You are undoubtedly aware that a war tax has been levied on railroad tickets, telephone messages, telegraph messages, freight and express way bills and Pullman tickets.

We are in receipt of a communication from the Commissioner of Internal Revenue stating that the State and Government is exempt from this tax and we are also advised by the Montana Board of Examiners that the State will not approve in expense accounts any money expended on war taxes. This applies to mileage books which were purchased previous to November 1st, 1917, as well as mileage books purchased after November 1st, 1917.

You will, therefore, not pay any war taxes on the above mentioned items, but will give the conductor or agent the following statement:

Date 191.....

I certify that the ticket (or tickets) No., Form No. for (state the purpose for which purchase, whether for transportation by rail or water, or for seat, berth, or stateroom in parlor car, sleeping car, or on vessel, or for charges for excess baggage) from to via is on account of official business and not for private purposes, and is exempt from the tax imposed by the Act of October 3, 1917.

(Signature of officer or employee purchasing ticket.)

(Title)

(Department or Establishment)

All who have mileage books will go at once to their local agent and have their mileage book certified that it has been "Issued on State Transportation Request" and is being used for official business only.

For identification, the Board of Examiners will forward you in a few days a card certifying that you are employed by the Montana Livestock Sanitary Board. Until you receive this card, use the identification card which has been forwarded you by this office.

Yours very truly,

W. J. BUTLER,

State Veterinary Surgeon.

Circular Letter No. 24.

Helena, Montana, November 23, 1917.

To All Deputy State Veterinary Surgeons:

In testing mixed shipments such as horses and cattle, do not make out separate test charts. Use one chart and be careful to designate the species of animal tested and the test used. Also in reporting mixed interstate shipments, just use one form SV 17.

Please let me remind you that we are not receiving reports in accordance with instructions. An SV Form 17 must accompany all charts and cover all inspections made.

Let me impress upon you once more the necessity of your reading the pamphlet which contains the Livestock Sanitary Laws and Regulations of the State Sanitary Board.

Yours very truly,

W. J. BUTLER,

State Veterinary Surgeon.

Circular Letter No. 25.

Helena, Montana, November 23, 1917.

To All Deputy State Veterinary Surgeons:

I have been notified by the United States Bureau of Animal Industry that they can no longer furnish us with mallein.

Any mallein which you may have on hand please return to this office, as we will require every possible drop of mallein that we can get hold of for making official tests within the state.

For interstate shipments, you will have to purchase the mallein wherever you may be able to obtain it. But all mallein so purchased must be manufactured under a permit issued by the U. S. Bureau of Animal Industry.

Yours very truly,

W. J. BUTLER,

State Veterinary Surgeon.

SERIES OF 1918.

Circular Letter No. 1.

Helena, Montana, December 20, 1917.

To All District Deputy State Veterinary Surgeons:

During the past year which ended November thirtieth, 1917, the office of the Livestock Sanitary Board inspected a total of 1,151,672 animals. In making these inspections the District Deputies covered 113,049 miles. The cost of the inspections averaged about 3½c per head.

As you are aware, we have been working hard to make an organization worthy of the confidence and backing our stockmen have given us. I think the results show a decided improvement over the work of previous years.

We have made a more systematic campaign against infectious contagious diseases, and we have accomplished more lasting results.

While we have made a decided improvement, we can still do better. I want each of you to feel that the Livestock Sanitary Board organization is your own personal organization. Do your every-day work thoroughly and systematically and do it promptly.

We have splendid sanitary laws. We have a sanitary board that is behind you at every turn in the road. We have a sanitary organization that is in splendid financial condition. With such an organization behind you, it is up to you to make the Livestock Board of Montana the BEST Livestock Sanitary Organization in the United States.

The Board desires to thank you for the work you have done in the past and to wish each and every one of you a Merry Christmas and a Happy and Prosperous New Year.

Yours very truly,

W. J. BUTLER,

State Veterinary Surgeon.

Circular Letter No. 2.

Helena, Montana, December 22, 1917.

To All Deputy State Veterinary Surgeons:

During the past year we inspected a total of 1,151,672 animals. These inspections took in all classes of animals. No serious outbreak of any infectious contagious disease occurred in Montana during the year 1916-1917. We had two small outbreaks of anthrax in the northeastern part of the state. Vigorous measures were taken and the disease stamped out.

We distributed 146,295 doses of blackleg vaccine during the past year. The reports we have received indicate that, while blackleg is still prevalent in the state, there has been a material reduction over the past years.

There has been considerable scab in cattle on the Ft. Belknap and Blackfeet Indian Reservations. Considerable dipping was done there this year, but the disease still persists. The State dipped a number of cattle in Phillips County, just east of Ft. Benton Indian Reservation, and also some cattle in the northern part of Lewis & Clark County, which came from Canada.

We also have a little scab in the Molt cattle, just west of Broadview, in Stillwater County, and a few cases up in the very northeastern part of Sheridan County.

We tested 13,526 dairy cattle during the past year. This is not as many as I would like to have seen tested. We should do better next year. We found 706 reactors, a percentage of 5.2 per cent for the year. The slight increased percentage is really due to more systematic work and to our cleaning up during April and October several dairies which we have strongly suspected of plugging their cattle in the past. During the other months, the percentage of reactors averages from .012 to .045 per cent.

We have had one or two slight outbreaks of hemorrhagic septicemia. These outbreaks have not been serious, but I call your attention to this, with the request that you be on the lookout for this disease.

During the past year, in conjunction with the Bureau of Animal Industry, we tested for dourine 9,435 horses and found 340 reactors, or 3.6 per cent. More than 60 per cent of these animals were found on the Ft. Belknap Indian

Reservation. We found one new center of infection near Mecaha, which takes in eastern Fergus and western Dawson Counties, south of the Ft. Belknap Indian Reservation. We made a systematic campaign and received the support of all the horsemen in that district, so that if we get a fair test this coming spring, the disease should be practically eradicated from that district this coming year. The other dourine work was carried on in northern Valley County and a very systematic campaign carried on by the Federal Veterinarians working in that district. Judging from our past experience, we are of the opinion that very little dourine remains in any of the districts we have tested out.

We have had some sheep scab in Teton County, but I think I may safely say that the disease has been eradicated in all bands, with the possible exception of the Flowerree Horse & Sheep Co., whose sheep are still under quarantine; and while there are no symptoms of scabies, at the present time, it is possible that due to an infected range, we may have to dip their sheep again this coming spring.

Lip and leg ulceration has not been as bad this fall as it was last fall, though it is still, and probably will continue to be for some years to come, a disease to be feared during the winter months. It has been our experience that many sheepmen neglect disease until it has become serious. They then become alarmed and overtreat the condition.

We have had very little hog cholera during the past year—less than we have had during the past few years. With reference to hog cholera, I desire to call your attention to the fact that necrobacillosis is oftentimes confounded with hog cholera. For your information, I beg to advise you that Dr. Rudolph Snyder, of the U. S. Bureau of Animal Industry, has been located in Helena, to co-operate with this office in the investigation of infectious contagious diseases, and with special reference to hog cholera. Please, therefore, report all cases of hog cholera, or suspected hog cholera, or any infectious contagious disease promptly and render Dr. Snyder every assistance whenever he is in your territory.

Our district deputies have traveled 113,049 miles in the past year. While I have not itemized the mileage of resident deputy state veterinary surgeons, it will approximate 37,000 miles, or a grand total of 150,000 miles for the year.

The stockmen of Montana have placed more confidence in their livestock sanitary corps than is the custom with other states. It is up to us as professional men to see that this confidence is not misplaced. We want you to take a personal interest in the organization. Read the Sanitary Laws and Regulations often and carefully. Read up on each case you are called upon to investigate. Do not simply pass it off as something you know all about. Make every inspection thoroughly, promptly and efficiently. Do this and you will not only make the Livestock Sanitary Board of Montana the most effective in the United States, but you will also increase your professional reputation and money making ability.

The Sanitary Board desires me to express to you their appreciation of your loyal and effective work, and to extend to each and every one of you our best wishes for a Merry Christmas and a Happy and Prosperous New Year.

Yours very truly,

W. J. BUTLER,

State Veterinary Surgeon.

Circular Letter No. 3.

Helena, Montana, January 3, 1918.

To All Deputy State Veterinary Surgeons:

In forwarding laboratory specimens where legal evidence may be desired, always seal the original container in the presence of one or more reliable witnesses. If the container is not sealed, it is practically impossible to introduce the findings as evidence in a criminal or civil case.

This applies to tissues as well as where a chemical analysis is desired.

Where cyanide of potassium is suspected, add enough baking soda or sal soda to neutralize the acidity of the contents; also to prevent decomposition, add grain alcohol where a chemical analysis is desired.

Yours very truly,

W. J. BUTLER,

State Veterinary Surgeon.

Circular Letter No. 4.

Helena, Montana, January 11, 1918.

To All Deputy State Veterinary Surgeons:

Please be very careful to use your mileage books on strictly State travel only. Pay the Federal tax on all tickets purchased, telephone and telegrams that are not for official work. Misuse of your mileage books and railroad tickets and violations of the Federal Law are very serious offenses. Please follow these instructions absolutely so that no complaint can be lodged against this Department.

Just one more word about our files in this office. Every official letter and every report must be placed on file. Our files should be so complete and in such order that anyone can come into the office and immediately be conversant with the work accomplished and the work on hand. You know what you have done and I know about it; but if it is not in writing and we should have to leave the State, the persons taking up the work would be seriously handicapped.

Write just as few letters as you possibly can. Make every report of inspection on an SV Form 17. Any additional information may be made on the back of the SV Form 17. Of course, if there is something that you want to explain that cannot be done in any other way, then write a letter, but make it short and make it explicit.

On all sheep shipments into the State and in every other case where a quarantine is necessary, immediately issue a quarantine notice and send the duplicate to this office. Keep in mind the quarantine which you have issued and when it is time to release the quarantine, inspect the stock, get the original notice from the owner, sign the release on the back and forward it to this office. If you cannot get the original from the owner, forward a release on an SV Form 17 and make a note that you were unable to obtain the original notice. Such action is necessary in order to keep our files complete and to produce proper evidence should we desire to take the matter into court, or should we, ourselves, be taken into court.

Yours very truly,

W. J. BUTLER,

State Veterinary Surgeon.

Circular Letter No. 5.

Helena, Montana, January 15, 1918.

To All Deputy State Veterinary Surgeons:

I am in receipt of the regulations from Dr. S. H. Ward, State Veterinarian of Minnesota:

**“STATE OF MINNESOTA
LIVESTOCK SANITARY BOARD**
Regulations Governing the Shipment of Cattle for
Feeding and Stocking Purposes.

“WHEREAS, a contagious and infectious disease, known as hemorrhagic septicemia, appears commonly in shipments of cattle originating from stock yard centers:

“THEREFORE, by virtue of the power and authority vested by Section 4691, R. L. 1913, the Livestock Sanitary Board hereby orders that during the months of October, November, December and January, all cattle intended for feeding or stocking purposes and destined to points within the State of Minnesota, shall be vaccinated with the Hemorrhagic Septicemia vaccine as a preventive against said disease before being shipped from such stock yard centers.”

January 11, 1918.

**“Regulations Governing the Shipment of Swine
by Express.**

“In view of the handicaps and delays incident to the methods of inspection and issuing of health certificates to cover express shipments of swine in crates:

By virtue of the power and authority vested by Section 4691, R. L. 1913, the Livestock Sanitary Board has this day adopted the following regulation:

“That the importation of purebred swine by express in crates is hereby permitted when accompanied by an affidavit of the owner, countersigned by the State Veterinarian, to the effect that said swine, to the best of his knowledge and belief, are not affected with cholera, necrobacillosis, or other contagious and infectious swine disease, and that cholera has not existed upon the premises from which said swine have been removed for a period of not less than three months immediately prior to date of shipment. Also that said swine have not been subjected to the serum-virus treatment

within thirty days immediately prior to date of shipment.

January 11, 1918."

Please read these regulations over carefully, and instruct prospective shippers of livestock to Minnesota of same.

Yours very truly,

W. J. BUTLER,

State Veterinary Surgeon.

Circular Letter No. 6.

Helena, Montana, January 21, 1918.

To All District Deputy State Veterinary Surgeons:

The mid winter meeting of the Montana Medical Veterinary Association will be held at Great Falls on January 25th and 26th.

This is to advise you that if you can possibly arrange your work I would request that you attend this meeting.

There will be subjects discussed which will be of vital interest to stockmen and to veterinarians employed in sanitary work.

If you attend this meeting it will be considered as State work and you will be allowed your necessary expenses. I would request that you keep these expenses down just as low as possible.

Yours very truly,

W. J. BUTLER,

State Veterinary Surgeon.

Circular Letter No. 7.

Helena, Montana, February 2, 1918.

To All Deputy State Veterinary Surgeons:

I am in receipt of the following letter from Dr. H. George Bodle, State Veterinarian of Idaho:

"Boise, Idaho, February 1, 1918.

"Dr. W. J. Butler,

Helena, Montana.

"Dear Doctor:

"Your letter at hand and contents noted.

"In regard to sheep being imported into the state, we require inspection at railroad destination. The inspection at state line has reference to the sheep that are trailed into the state. Our regula-

tions require all bucks to be dipped at destination, but we waive that, and it is left to the livestock inspector or the deputy state veterinarians who inspect. If bucks are clean, we do not compel them to be dipped, as I go on the theory that I would not take medicine unless I were sick. Last week I permitted a band of bucks to come from Beaver County which were affected with disease. Bucks are to be under strict quarantine, fed and slaughtered at Idaho Falls, Idaho.

Yours truly,
 (Signed) H. G. BODLE,
 State Veterinarian."

Kindly read this letter over carefully and keep on file for future reference.

Yours very truly,
 W. J. BUTLER,
 State Veterinary Surgeon.

Circular Letter No. 8.

Helena, Montana, February 2, 1918.

To All District Deputy State Veterinary Surgeons:

When tuberculin testing or mallein testing large numbers of animals and where the descriptions of the animals are necessarily much the same, in future, for all intrastate work, simply give the total number of the different classes of animals which give a negative test.

All reactors must be individually classified and a description given of each.

In all interstate shipments, each animal should be individually classified as has been the practice heretofore.

The following is an example:

24	purebred Hereford yearling bulls	N
4	grade heifers, Hereford yearlings	N
1	grade yearling heifer, whiteface, white switch	P+
1	grade yearling heifer, brockle face	P+
30	Holstein grades	N
1	Holstein grade cow B & W, named Pansy	P+
1	Holstein grade cow B & W, no name	P+

Total 62 cattle

When testing purebred animals, while the total may be bunched, I think it advisable to give the registry numbers of the animals which have passed as well as the reactors.

The registry numbers may be given in one or more columns so that only one chart need be used.

The idea of this is to save charts and time. Of course, if the owner desires each animal individually classified, then you will classify each animal.

Yours very truly,

W. J. BUTLER,

State Veterinary Surgeon.

Circular Letter No. 9.

Helena, Montana, March 22, 1918.

To All Deputy State Veterinary Surgeons:

I am in receipt of the following amendment to State of Washington Order No. 7:

“AMENDMENT 1 TO STATE OF WASHINGTON DEPARTMENT OF AGRICULTURE ORDER NO. 7”

Regulations Relating to Importation of Sheep

Effective on and after March 19, 1918.

“Under the authority conferred upon the Commissioner of Agriculture by the provisions of the laws of the State of Washington, it is ordered that Department of Agriculture Order No. 7, dated June 11, 1915, be hereby amended to read as follows:

Sheep for breeding, grazing or feeding purposes will be admitted into the State of Washington only upon the following conditions:

1. That they be accompanied by a certificate of health from an inspector of the United States Bureau of Animal Industry, or a veterinary inspector of the Livestock Sanitary Board of the state in which the shipment originated.

2. Satisfactory proof in the form of an affidavit must be submitted by the owner or his agent, stating that the sheep have been in the district from which shipped at least sixty days next preceding the date of importation and that no scabies or other contagious or infectious disease affecting sheep has existed among them nor among sheep with which they have come in contact for sixty days past.

3. If shipped, the affidavit must state that they have been handled in clean and disinfected cars and vessels direct from the farm or range.

Sheep imported for immediate slaughter will be admitted without inspection, provided they are

billed direct to slaughtering establishments and have originated from a district free from scabies."

(Signed) E. E. BENSON, Commissioner of Agriculture."

Please read this order carefully and see that its provisions are carried out on shipments from Montana.

Yours very truly,

W. J. BUTLER,

State Veterinary Surgeon.

Circular Letter No. 10.

Helena, Montana, March 21, 1918.

To All District Deputy State Veterinary Surgeons:

In testing horses for dourine, it will not be necessary to furnish this office with SV Form 17. In lieu of SV Form 17, the Bureau of Animal Industry QD Form 75 will be accepted. If you do not have any QD Form 75 on hand, then an SV Form 17 must be forwarded in its place. When your work will necessitate your taking a number of blood samples, please write to Dr. H. H. Cohenour, Federal Inspector in Charge, at Bismarck, N. D., requesting him to furnish you with an adequate supply of QD Form 75.

Yours very truly,

W. J. BUTLER,

State Veterinary Surgeon.

Circular Letter No. 11.

Helena, Montana, March 21, 1918.

To All Deputy State Veterinary Surgeons:

When using Blackleaf Nicotine dip, always add one pound of lye to each 100 gallons of water. This is to break the viscosity of the water; in other words, to make the water chemically wet. I am advised that by the addition of lye nicotine acts with much greater rapidity and gives better results in the destruction of scab mites and sheep ticks.

In charging the vat, one pint of nicotine to 120 gallons of water will give a 5/100 of one per cent solution. In replenishing the dip for waste and evaporation use one pint of nicotine to 90 gallons of water when dipping sheep. In

replenishing the dip for evaporation and waste in dipping cattle, use one pint of nicotine to 100 gallons of water. The reason for using this increased strength is to make up and allow for a certain evaporation and chemical change that takes place in the nicotine.

Cattle are much more susceptible to nicotine poisoning than sheep. Under no circumstances should the dip be stronger than 7/100th of one per cent nicotine. Keep it between 5/100ths of one per cent and 7/100ths of one per cent nicotine.

Horses are extremely susceptible to nicotine poisoning and must not be dipped in nicotine dips.

Yours very truly,

W. J. BUTLER,

State Veterinary Surgeon.

Circular Letter No. 12.

Helena, Montana, March 5, 1918.

To All Deputy State Veterinary Surgeons:

We are advised that many ewe lambs will be purchased from feed lots in Colorado and other states and shipped back onto Montana ranges this spring. On account of the danger of scab and other infection being in lambs that have been fed in feed lots, we deem it necessary to take extra precautions in inspecting and handling such shipments.

You will therefore ascertain, in all sheep shipments, their origin, whether or not they are from feed lots, and also whether or not they have been mixed with sheep from various localities or different states. Sheep that have come in contact with or have had a chance of being associated with sheep from Texas, New Mexico, Arizona, Southern Colorado, California, Nevada, Oregon, or Southern Idaho must be especially watched. In all such instances, these sheep must be held in a pasture or feed lot and not exposed to other sheep for a period of not less than 90 days. If it is impossible to hold them in such pastures or feed lots, then they must be dipped twice before they are turned out on the open range.

These restrictions will not apply to sheep that have simply gone out of Montana into Western North Dakota, Western South Dakota, Northern Wyoming or Northern

Idaho for winter grazing but you will please exercise every precaution and make every inspection exceptionally careful and thorough. In quarantining sheep, you will please see that foreign sheep are not quarantined on the home range or permitted to come in contact with any of our native sheep. In each and every instance where quarantines are established, the range must be properly flagged with red flags.

Yours very truly,
W. J. BUTLER,
State Veterinary Surgeon.

Circular Letter No. 13.

Helena, Montana, April 1, 1918.

To All District Deputy State Veterinary Surgeons:

Doctors Healy, Holzer, and McMillan, Federal Veterinarians, will arrive at Helena about April 6th. They have been detailed on tuberculin testing of accredited herds. Dr. Walker is already in Montana with headquarters at Helena on tuberculin testing of cattle for the Accredited Herd list. Whenever any of these veterinarians are in your district and desire your assistance in testing, please give them every assistance. When doing this work, render your reports as usual with the notation that the work was done in conjunction with Dr. _____, Federal Veterinarian.

Yours very truly,
W. J. BUTLER,
State Veterinary Surgeon.

Circular Letter No. 14.

Helena, Montana, April 11, 1918.

To All Deputy State Veterinary Surgeons:

In making out your expense accounts, please see that they are made out absolutely in accordance with State regulations. Very few months pass that I do not have to appear personally before the Board of Examiners and explain someone's expense account simply because that expense account has not been made out in accordance with existing orders. There is no justification for my having to do this.

Read the regulations carefully and make your expense account explicit. In auto hire, give mileage and time consumed. If a resident deputy, on your claims for per diem give time and the ranch visited or name of the owner whose stock was inspected. Without again going into detail, I may say, that in general make out your expense account as you would desire it made out if you were the person paying the bill.

With reference to test charts: The triplicates in many cases come into this office practically illegible. This office went to the expense and trouble of forwarding you a tin back sheet so that carbon copies would be neat and plain. The office also furnished you carbon paper and will furnish you carbon paper and other supplies upon request. In making out test charts, please write plainly. If your figures are large and there is not sufficient space to write the temperature plainly, say 101.2, then simply write 1.2. Of course if the temperature is below 100, then you will have to write the complete temperature, such as 99.4. In the case of 100.5, simply write 0.5. Decimals must always be given in tenths, the tenth being designated by the period.

We must judge a man's ability by all of his work. If your test charts, health certificates and reports are not neat and forwarded promptly, we must assume that your other work is performed on the same basis. The Sanitary Board desires to give you every consideration and in return they require the best you have to give in every service performed. We can accept no excuses along this line. The work of this Department is judged by its work in its entirety.

I note that in sheep quarantines in many instances the quarantine issued reads: "Sheep quarantined for a period of 90 days." The quarantine should not read that way. It should read: "Sheep quarantined for a period of not less than 90 days and until inspected and released by a representative of the Montana Livestock Sanitary Board."

Some deputies apparently are under the impression that it is compulsory to make the intradermal tuberculin test on official State tests. That is not correct. The intradermal test is only one of our tests. The thermal, or subcutaneous test is also an official test and should be made in every test

on gentle cattle when it will save time and expense to the State.

Yours very truly,
W. J. BUTLER,
State Veterinary Surgeon.

Circular Letter No. 15.

Helena, Montana, April 30, 1918.

To All Deputy State Veterinary Surgeons:

I enclose you an order which has just been received from the Minnesota Livestock Sanitary Board, and also a copy of an order received from the Wisconsin Sanitary Board. Also encosed find regulations governing the admission of livestock into Kentucky.

Relative to ear tags for Wisconsin cattle, this office cannot furnish each deputy ear tags to have on hand at all times, but whenever a shirment comes up, if you will rotify us, we will forward you the required number of ear tags.

Please keep these orders on file and see that they are observed.

Yours very truly,
W. J. BUTLER,
State Veterinary Surgeon.

Circular Letter No. 16.

Helena, Montana, April 30, 1918.

To All District Deputy State Veterinary Surgeons:

By express, there has been forwarded to you one complete Blackleaf testing outfit. Please always keep this on hand and keep it in good repair. Also always keep a supply of chemicals on hand. Whenever a nicotine dip is used, test the dip before dipping. Do not buy chemicals at local drug stores. All chemicals necessary will be furnished you from this office.

Yours very truly,
W. J. BUTLER,
State Veterinary Surgeon.

Circular Letter No. 17.

Helena, Montana, May 3, 1918.

To All District Deputy State Veterinary Surgeons:

I am forwarding you a supply of identification tags for cattle which react to tuberculosis. In order to differentiate and itemize salvage moneys obtained and to identify reactors, it is advisable that all cattle which react to the tuberculin test be immediately tagged with a T. B. Reactor Tag—the tag number to be noted on the test chart and also on the certificate of slaughter and post mortem report. Please advise me whether or not you have a pair of tongs for attaching the tags.

Yours very truly,

W. J. BUTLER,

State Veterinary Surgeon.

Circular Letter No. 18.

Helena, Montana, May 9, 1918.

To All District Deputy State Veterinary Surgeons:

Please arrange your work so that you will be in Helena the afternoon and evening of May 27th. There will be a meeting of the Livestock Sanitary Board and also a meeting of the Livestock Commission and Brand Inspectors on that date.

Yours very truly,

W. J. BUTLER,

State Veterinary Surgeon.

Circular Letter No. 19.

Helena, Montana, June 3, 1918.

To All Deputy State Veterinary Surgeons:

The State Game Warden has requested me to advise all of our deputies to see that refuse and waste dip from dipping vats does not contaminate streams containing fish. I wish, therefore, that you would be careful and see that the drainage of the waste dip is not run directly into streams but first into a sump hole so that there will be no danger of contaminating streams with the dip.

Yours very truly,

W. J. BUTLER,

State Veterinary Surgeon.

Circular Letter No. 20.

Helena, Montana, June 3, 1918.

To All District Deputy State Veterinary Surgeons:

At the last meeting of the Livestock Sanitary Board, an order was passed whereby all district deputies are to furnish a bond in the sum of One Thousand Dollars (\$1,000.00) to the State of Montana for the true and faithful performance of the duties imposed upon them by law.

You will, therefore, please forward this office as soon as possible bond to cover the above order. Take a receipt for the premium and make claim for the amount of premium on your next expense account.

Yours very truly,

W. J. BUTLER,
Sec'y Livestock Sanitary Board.
State Veterinary Surgeon.

Circular Letter No. 21.

Helena, Montana, June 7, 1918.

To All District Deputy State Veterinary Surgeons:

Relative to obtaining a bond, I am advised that the Western Accident Insurance Company has written you that I have requested them to forward you an application. That is not quite the fact. Upon request, I furnished the Western Accident Insurance Company a list of our district deputies. You may obtain your bond from this company or from any other company. It is for you to decide. A bond from any company legalized to do business in the State of Montana will be satisfactory to the Livestock Sanitary Board.

Yours very truly,

W. J. BUTLER,
State Veterinary Surgeon.

Circular Letter No. 22.

Helena, Montana, June 25, 1918.

To All Deputy State Veterinary Surgeons:

I am in receipt of the following regulations from the Maryland State Board of Agriculture:

“Baltimore, Md., May 10, 1918.
IMPORTATION OF EQUINE ANIMALS
Effective July 1st, 1918.

“Horses, mules and asses brought into the State of Maryland must be accompanied by a certificate of health, approved by the proper authorities in control of diseases of domestic animals in the state of export, stating that the animals inspected are free from any contagious and infectious disease and have not been exposed there to for a period of thirty days prior to shipment. Duplicate copy of this certificate must be mailed to the office of the Livestock Sanitary Section of the State Board of Agriculture, 816 Fidelity Building, Baltimore, Md., when shipment is made.

MARYLAND STATE BOARD OF AGRICULTURE
Livestock Sanitary Section,
816 Fidelity Building,
Baltimore, Md.

R. C. Reed, Chief, Animal Industry.”

Please read this order carefully and see that its provisions are carried out on shipments from Montana.

Yours very truly,

W. J. BUTLER,
State Veterinary Surgeon.

Circular Letter No. 23.

Helena, Montana, July 3, 1918.

To All Deputy State Veterinary Surgeons:

We have absolutely no facilities at Helena for making a chemical analysis of stomach contents. I wish, therefore, that you would not send stomach contents to us, but send them direct to the Bureau of Animal Industry, Washington, D. C., or to the State Chemist, at Bozeman.

Unless instructed by this office otherwise, chemical analysis does not come under our jurisdiction, and the owner of the animal should take the matter up directly with the chemist as I believe a charge for chemical analysis is generally made.

Yours very truly,

W. J. BUTLER,
State Veterinary Surgeon.

Circular Letter No. 24.

Helena, Montana, July 16, 1918.

To All Deputy State Veterinary Surgeons and Sheep Inspectors:

When you quarantine imported sheep or sheep affected with or exposed to scabies, please always make the notation: "To be quarantined for a period of not less than ninety days and until released by a representative of the Live Stock Sanitary Board." Give in detail the quarantined area. If the quarantined area is on a National Forest Reserve, designate that the sheep are quarantined on the specific lease granted to the sheep in question.

If, for some good reason, the sheep must be moved, give the owner of the sheep a written permit to move, designating the trail and his new quarantine area. The new quarantined area must be definitely located before permitting the sheep to trail. Also, when sheep are unloaded, a written permit, designating the trail the sheep must use, must be issued and the quarantined area, to which the sheep are being trailed, must be designated in the permit or quarantine order.

It is required by law that imported sheep must be quarantined on land owned, leased or previously occupied by the owner of the sheep and the quarantined area flagged. It is also provided that the sheep shall be branded with a red letter "S" on the right side previous to their being trailed from their final unloading point. Please follow these instructions in all instances, as they are expressly and definitely required by law.

Also when inspecting foreign sheep, please inspect the cars in which they are shipped to see whether they have been properly disinfected for that shipment. Report immediately to this office if the cars have not been specifically cleaned and disinfected for that particular shipment, giving the car numbers and initials and lines over which the sheep are shipped, designating the origin and destination.

Yours very truly,

W. J. BUTLER,

State Veterinary Surgeon.

Circular Letter No. 25.

Helena, Montana, August 6, 1918.

To All Deputy State Veterinary Surgeons:

I am in receipt of the following regulations from the State Veterinary Surgeon of the State of Virginia:

“All cattle coming into the State of Virginia for dairy or breeding purposes, male or female, six months old and over, must be accompanied by a written certificate showing that said cattle have passed the tuberculin test not longer than four months before entering the State. Said test must have been conducted by a qualified veterinarian and approved by the livestock quarantine authorities or State Veterinarian of the state from which said cattle originate, or by the United States Bureau of Animal Industry. This certificate must be presented to and approved by the State Veterinarian of Virginia before said cattle shall be allowed to enter the State.

Upon arrival at their destination they shall be held in quarantine upon the owner's premises subject to a retest for tuberculosis not earlier than sixty (60) days nor later than ninety (90) days from the date of arrival. This quarantine is automatic upon arrival of said cattle at their destination.

It shall be unlawful to allow said cattle to be removed from said premises until they have been retested and the quarantine released by the State Veterinarian. This retesting shall be done by the State Veterinarian of Virginia, or by a veterinarian designated and deputized by him. Cattle reacting to said test shall be disposed of as under the general law and regulations thereunder governing the disposal of cattle reacting to said test. No charge shall be made to owner for veterinary service in making said retest.

EXCEPTION: Animals from a ‘Tuberculosis-Free Accredited Herd’ shall not be subject to quarantine upon arrival in Virginia, provided said cattle are actually accompanied by the certificate required under Sections 9 and 18 of the ‘Method and Rules with regard to Tuberculosis-Free Accredited Herds of purebred cattle, adopted by the United States Livestock Sanitary Association and by the representatives of Pure-Bred Cattle Breeders’ Association * * * * approved on behalf of the United States Bureau of Animal Industry * * * * By Dr. J. R. Mohler, Chief of

Bureau, December 23, 1917', and provided further that satisfactory proof of same is furnished the State Veterinarian of Virginia, who shall then authorize said cattle to be admitted into the State without restrictions as to quarantine for tuberculosis.

(Signed) J. G. FERNEYHOUGH,
State Veterinarian."

Please read this order carefully and see that its provisions are carried out on shipments from Montana.

Yours very truly,
W. J. BUTLER,
State Veterinary Surgeon.

Circular Letter No. 26.

Helena, Montana, August 6, 1918.

To All Deputy State Veterinary Surgeons:

I enclose a copy of a letter from Dr. W. J. Fretz, Federal Inspector in Charge of Tuberculin Eradication in the northwestern country. This letter is addressed to Federal Field Veterinarians. As Montana is cooperating with the United States Bureau of Animal Industry in tuberculosis eradication, and as a copy of all of our tuberculin charts is forwarded to the Bureau of Animal Industry, I wish you would please follow as closely as possible the instructions in paragraphs 2, 3, 4 and 5, as issued by Dr. Fretz to the Federal veterinarians. If there is sufficient room on the front side of the chart, please use the front side instead of the reverse side.

Yours very truly,
W. J. BUTLER,
State Veterinary Surgeon.

(Copy)

Enclosure

UNITED STATES DEPARTMENT OF AGRICULTURE
Bureau of Animal Industry

St. Paul, Minnesota, July 30, 1918.

To Field Veterinarians:

Please observe the following instructions in connection with making out tuberculin test charts:

1. All charts must be made in duplicate, one copy mailed to this office, and one to the State Veterinarian in the State in which you are operating.

2. The name of the owner must be written legibly, and the exact location of the farm indicated. For example—The State, City, County and R. F. D., and in addition, the addresses of the owners who do not reside on the farm.

3. The registry name and number of each animal must be entered in a legible manner on all test charts in connection with accredited herds, and in herds in the process of being accredited. In all other grade or mixed purebred herds the predominating breed or strain must be indicated. For example—Grade herd “Shorthorn Strain Predominating”, or Purebred herd “Holstein Strain Predominating”.

4. The following information in connection with sixty-day importation retests, if available, must be incorporated on the lines below the results of the test, or on the reverse side of the chart: Description of the animal, if name cannot be obtained, origin of the animal, from whom purchased, the name of the veterinarian making the test, date of last test, etc.

5. The following herd history, and any other additional data in connection with all tests, must be rendered on the reverse side of the chart, in order that the respective State Veterinarians will be in possession of the same information
(a) Presence and method of segregating suspicious or reacting animals to former tests—(b) Your recommendations regarding the disposition of reacting or suspicious animals as a result of your test—(c) Approval or dissent of the owner as to the disposition of the animals in question.

Respectfully,

(Signed) W. J. FRETZ,
Inspector in Charge.

Circular Letter No. 27.

Helena, Montana, August 27, 1918.

To All Deputy State Veterinary Surgeons:

For some reason, which I cannot understand, sheep quarantines are persistently being made out wrong. The law provides that imported sheep must be quarantined for not less than ninety days, and it also provides that inspec-

tion must be made before the sheep are released. The quarantine must not be made out to read as if it automatically ended at the end of a given space of time. When the quarantine is made out, it must be made out to state expressly that before being released, an inspection must be made of the stock previous to the release of the quarantine.

If this is not plain, write me, as we have been unable to take violations of quarantine into Court simply because the quarantine from a legal standpoint was made out as if it automatically terminated at the end of a given period.

Yours very truly,

W. J. BUTLER,

State Veterinary Surgeon.

Circular Letter No. 28.

Helena, Montana, September 3, 1918.

To All District Deputy State Veterinary Surgeons:

I am requested by the Board of Examiners to advise you to have your expense accounts in this office by Monday, September 9th; this for the reason that the office of the Board of Examiners is only open one-half day during State Fair week, on account of their office also having to take care of the State Fair accounts.

Yours very truly,

W. J. BUTLER,

State Veterinary Surgeon.

Circular Letter No. 29.

Helena, Montana, September 4, 1918.

To All Deputy State Veterinary Surgeons:

I am in receipt of the following regulation from the Louisiana Live Stock Sanitary Board:

“REGULATION 27

Shipment of Swine by Express

“The importation of purebred swine by express in crates, when shipped to Louisiana points, is hereby permitted, when accompanied by an affidavit of the owner, countersigned by the State Veterinarian, or other sanitary official in charge, to the effect that said swine, to the best of his knowledge and belief, are not affected with hog cholera or

any other contagious or infectious swine disease, and that cholera has not existed on the premises from which said swine have been removed for a period of not less than three months immediately prior to date of shipment. Also that said swine have not been subjected to the serum and virus treatment within thirty (30) days immediately prior to date of shipment.

“Affidavit must be made in duplicate, one copy to be delivered to the transportation company, accompanying shipment, and the other to the Live Stock Sanitary Board of Louisiana.”

LOUISIANA LIVE STOCK SANITARY BOARD.

(Signed) E. Pegram Flower,
Secretary and Executive Officer.

Approved:

Harry D. Wilson, Chairman.”

Please read this order carefully and see that its provisions are carried out on shipments from Montana.

Yours very truly,

W. J. BUTLER,
State Veterinary Surgeon.

Circular Letter No. 30.

Helena, Montana, September 26, 1918.

To All Deputy State Veterinary Surgeons:

I am advised that the Counties of Camas, Blaine, Butte, Jefferson, Madison, Teton, Bonneville, Bingham, Gooding, Lincoln, Minidoka, Power, Bannock, Twin Falls, Cassia, Oneida, Franklin and Bear Lake, in southeastern Idaho, have been quarantined for sheep scab, and that all sheep in that section are being dipped at the present time.

I am advised that the outbreak of sheep scab in Wyoming has been about cleaned up at the present time, and the only known scab in Wyoming is in a band of sheep in the southwestern corner of Wyoming, owned by the Quadras Company.

As far as I am able to learn, there is only one center of sheep scab in Washington. This infection was shipped into Washington from Portland stockyards.

I have been unable to determine the exact condition existing in Oregon, but as Washington claims to have received its infection from that state, and as I learned the

other day that a band of sheep shipped into one of our forest reservations was dipped for scabbies previous to their being shipped from Oregon, I am of the impression that sheep scab, to some extent, must exist in Oregon.

I am forwarding you this information so that you may give it to sheep men who contemplate going out of the state for sheep. I have no desire to have this information published in papers, but it is not confidential in any way.

Yours very truly,

W. J. BUTLER,

State Veterinary Surgeon.

Circular Letter No. 31.

Helena, Montana, September 30, 1918.

To All Deputy State Veterinary Surgeons:

The statutes provide that all bucks shipped into the state must be dipped at once and quarantined for not less than ninety days. On account of existing war conditions, the dipping of individual rams shipped into the state becomes impractical and practically impossible. The Livestock Sanitary Board, therefore, has decided that where purebred rams are shipped into the state in crates by express, and where they may be isolated for a period of ninety days, that in such cases the dipping of these animals will not be required. They must, however, be quarantined for a period of not less than ninety days and inspected before being released from quarantine.

Where a sheep owner has one or two other sheep, he may turn this ram in with them, but they must likewise be quarantined, and they must not be turned in with a band of sheep. In other words, if a man has five other purebred animals, he may keep the new purebred animal with these five head but none of the animals so quarantined may be used or removed to another band of sheep until the ninety-day quarantine period has expired and the sheep have been inspected and found free from disease.

Yours very truly,

W. J. BUTLER,

State Veterinary Surgeon.

Circular Letter No. 32.

Helena, Montana, September 30, 1918.

To All Deputy State Veterinary Surgeons:

Following is a copy of a letter which I have just received from Dr. N. T. Gunn relative to tuberculosis. The Louis Pene herd and also the Martina herd have had tuberculosis for years. It has just seemed impossible to clean them up. For this reason, I think Dr. Gunn's letter to me is of sufficient importance to be called to the attention of all interested in tuberculin testing. I would suggest that you read this letter over carefully and in tests that you make yourself always make a very close observation of the reaction. Do not simply depend on your eye-sight. Use your tactile sense with your professional intelligence.

"Butte, Montana, September 28, 1918.

Dr. W. J. Butler,
Helena, Montana.

Dear Sir:

I wish to call your attention to the fact that the cow failed to react in the Lois Pene herd, that I condemned on clinical inspection, proved to be a generalized case of tuberculosis. The carcass of one other in the herd that showed a very slight reaction was also condemned. Evidently the first one is the reason for the large number of reactors.

In Joe Martina's herd, the one with a very slight reaction was sterilized on post mortem. I believe that in these slight reactions, that the purple spot at the point of inoculation is almost positive evidence of tuberculosis. Close observation will nearly always show evidence of induration and tenderness of the localized spot. Of course, I suppose that most of the men know this, but for the benefit of those who haven't had the experience in herds where tuberculosis has existed for a number of years, it might be of some little value.

(Signed) N. T. GUNN."

Yours very truly,
W. J. BUTLER,
State Veterinary Surgeon.

Circular Letter No. 33.

Helena, Montana, October 16, 1918.

To All Deputy State Veterinary Surgeons:

I desire to call your attention to Section 10, 11 and 12 of the Livestock Sanitary Laws of Montana.

By reading Section 10 carefully, you will note that animals, with reference to compensation for slaughter, are divided into two classes. You will note that Paragraph 4 of Section 10 states that animals of the first class shall be paid for as animals of the second class when a mistake has been made, etc.

The law provides that animals of the first class shall be paid for according to their full ASSESSED valuation, and that the county shall pay one-half and the state one-half of the assessed valuation. It provides that animals of the second class shall be paid for according to their full APPRAISED valuation, and that the state shall pay the total appraised value, and that the county shall not pay anything. It also provides that in animals of the first class, salvage money shall be divided equally between the county and the Livestock Sanitary Board Fund. In animals of the second class, it is provided that all salvage money shall be made payable to the Livestock Sanitary Board Fund.

Please be very careful in making out your certificates of slaughter. If, on careful post mortem inspection, you are unable to find any lesions, do NOT make out a certificate of slaughter. Take laboratory samples and forward them either to the State or Bureau of Animal Industry Laboratory. If the Laboratory advises you that lesions were found, then make out your slaughter certificates as in the case of animals of the first class and have the salvage money made payable one-half to the county and one-half to the Livestock Sanitary Board Fund. If the laboratory findings are negative and no diseased lesions are found, then do not make out a certificate of slaughter, but notify this office, and we will forward the owner of the animals in question a state voucher on which to render his account. In such a case, you will make payable to the Livestock Sanitary Board Fund all salvage moneys obtained.

Yours very truly,

W. J. BUTLER,

State Veterinary Surgeon.

Circular Letter No. 34.

Helena, Montana, October 23, 1918.

To All Deputy State Veterinary Surgeons:

I have resigned my commission in the National Guard of Montana and have enlisted in the Light Artillery, U. S. A. I have been ordered to report to the Central Training School at Camp Zachary Taylor, near Louisville, Kentucky.

In the past, you have demonstrated by actual experience that you are capable of overcoming tremendous difficulties. During the foot-and-mouth disease outbreak, you did that which no other state or county or sanitary organization has ever accomplished—you eradicated foot-and-mouth disease from a range section. By your work, you not only saved the livestock industry of Montana but also the financial institutions. If you have done this in the past, you can, and I am sure you will, if the necessity arises, do even better.

Dr. Nash will take charge of this office and I trust that you will give him every consideration and every support that you have given to the office during the past five years.

I desire to thank you for the assistance you have ever been to the State Veterinary Surgeon and to wish you all success and the best luck.

Yours very truly,

W. J. BUTLER,

State Veterinary Surgeon.

PROCLAMATION BY THE GOVERNOR.

Wheareas, The Livestock Sanitary Board has recommended that the Proclamation of the Governor of Montana bearing date the twenty-eighth day of November, A. D., 1916, and prohibiting the importation into the State of Montana of cattle, sheep, other ruminants, and swine from the States of Nebraska, Missouri and Kansas, and from all public stockyards east of Montana, be revoked:

NOW THEREFORE, I, J. M. Burlingame, Acting Governor of the State of Montana, upon the recommendation of said Livestock Sanitary Board, do hereby revoke the said Proclamation of date the twenty-eighth day of November, A. D., 1916.

Livestock may again come into the State of Montana from any state of the Union, if accompanied by certificate of health in accordance with the requirements of the Laws of Montana and the regulations of the Livestock Sanitary Board.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the Great Seal of the State to be affixed.

DONE at the City of Helena, the Capital, this the eleventh day of December, in the year of our Lord one thousand nine hundred sixteen.

(Signed) J. M. BURLINGAME.

LIVESTOCK SANITARY BOARD ORDERS.

Order No. 5.

Regulations Relative to Tuberculosis in Cattle.

1. All tubercular animals, or animals reacting to the tuberculin test, must be segregated immediately.
2. All stables, corrals and barns where tubercular animals are known to have been housed, must be thoroughly disinfected under the personal supervision of an inspector of the Livestock Sanitary Board. This disinfection must take place within five days after registered quarantine notice is given owner, unless special permission is received from the State Veterinary Surgeon.
3. No employee or person shall be allowed to handle or milk diseased cattle and thereafter handle or milk healthy cattle, unless he or she change their clothing and thoroughly wash and cleanse their hands.
4. Unless the owner or person in charge of reacting animals makes a written request, within ten days after animal or animals have been quarantined, that he or she desires to employ the Bang System or hold the animals in quarantine for other lawful purposes, all reactors to the tuberculin test shall be ordered destroyed by the State Veterinary Surgeon.
5. At the discretion of the State Veterinary Surgeon, a reasonable time (which time is to be determined by the State Veterinary Surgeon) may be given the owner to confine and isolate away from all other animals and quarantine in a suitable place all reactors to the tuberculin test, or cattle known to be diseased with tuberculosis.
6. No milk or dairy product from a tubercular animal, or an animal that has reacted to the tuberculin test, shall be used for human consumption.
7. No milk or dairy product from a tubercular animal, or an animal that has reacted to the tuberculin test, shall be used for feeding any animal, until after such milk has been properly pasteurized.
8. Any violation of the rules and regulations of the Livestock Sanitary Board will necessitate the immediate slaughter of all reacting animals.

Sept. 23, 1913.

Order No. 6.**Regulations Relative to Dourine in Horses.****Regulation No. 1.**

Whenever the Board, when in session, or the State Veterinary Surgeon, when the Board is not in session, after investigation, determines that an emergency exists in any part of the State demanding the same, it or he may direct and proceed at once to seize and immediately castrate any stud found running at large contrary to law, without holding the same for five days or for any time.

Regulation No. 2.

The State Veterinary Surgeon be, and is hereby authorized to gather all studs found running at large on the open range in violation of law, and to castrate them, and, if found diseased, to castrate or destroy them, the expense thereof to be borne by the owner of such studs.

Regulation No. 3.

All owners of stallions or mares, shall, when demanded to do so by the State Veterinary Surgeon or his deputy gather all their stallions and mares and have them at a given place on a date named by the State Veterinary Surgeon or his deputy, for the purpose of having the same tested or examined.

Regulation No. 4.

No animal shall be bred in any restricted district until stallions have been tested and found free from disease, and no mare that has been exposed to dourine shall be bred until she has been blood tested and released.

Regulation No. 5.

Whenever it shall be determined necessary by the State Veterinary Surgeon or his deputy, all owners of animals tested for dourine shall immediately brand such animals with a number so as to identify same, with the number on such part of such animal as may be determined by the State Veterinary Surgeon or his deputy.

Regulation No. 6.

Any animal reacting to the blood test for dourine shall be immediately branded by the owner with a **D** on the left jaw. All mares afflicted with dourine shall be destroyed and all stallions shall either be destroyed or castrated subject to the approval of the State Veterinary Surgeon. No animal

so castrated shall be released from quarantine within a period of six weeks, and no animal afflicted with dourine shall be allowed to run on the open range.

Order No. 7.

Regulations Governing Tuberculin Reactors Held in Quarantine.

1. Owner or agent in charge must file with the State Veterinary Surgeon a written request for permission to hold tuberculin reactors in quarantine.

2. Owner or agent in charge must file with State Veterinary Surgeon a list containing names and description of all cattle held in quarantine.

3. Owner or agent in charge must report in writing the death or disposal of any animals quarantined.

4. When the "Bang" or other system of breeding out tuberculin reactors is employed, the owner or agent in charge must within thirty days report in writing to the State Veterinary Surgeon all animals bred to a tuberculin reactor, and all animals so bred must be held in quarantine until tuberculin tested and released by the State Veterinary Surgeon. All calves sired or calved by a tuberculin reactor must likewise be held in quarantine and tuberculin tested before being released.

5. When the "Bang" or other system of breeding out tuberculin reactors is employed, the expense of tuberculin testing shall be borne by the Live Stock Sanitary Board, provided the services of a deputy state veterinary surgeon for such tuberculin test are not necessary or requested oftener than once in every six months; and provided further, that animals so quarantined shall have been in the State of Montana one hundred and eighty days or more previous to their reacting to the tuberculin test. Where the services of a deputy state veterinary surgeon are necessary or requested oftener than once every six months for testing any or all of a quarantined herd, and where animals have not been in the State of Montana one hundred and eighty days or more previous to their reacting to the tuberculin test, then the owner must pay all necessary expenses pertaining to such test.

October 1, 1914.

Order No. 8.**Regulations Governing the Sale, Distribution and Use of Anti-Hog Cholera Serum, also the Sale, Distribution and Use of Serum and Virus within the State of Montana.**

1. All anti-hog cholera serum sold within the State or imported into the State of Montana for sale, distribution or use, shall be produced under a license issued by the United States Bureau of Animal Industry, Department of Agriculture.

(a) The use of anti-hog cholera SERUM is not restricted in any way.

2. The sale, distribution or use of VIRUS shall be prohibited except under the following conditions, to-wit:

(a) All VIRUS used for immunizing hogs against cholera shall be administered by veterinarians who are graduates of recognized veterinary colleges, or by owners to whom a permit will be issued by the State Veterinary Surgeon upon being furnished with proof of the fact that such owners are qualified to administer VIRUS without danger of spreading the contagion of hog cholera. In all cases the use of VIRUS by laymen shall be limited to hogs owned by the person to whom permit is granted.

(b) No VIRUS shall be shipped into the State or sold or distributed within the State of Montana unless consigned, sold or distributed to a licensed graduate veterinarian or owner holding permit from the State Veterinary Surgeon.

(c) All hogs subjected to the simultaneous method of immunization, together with all yards, corrals, sheds or feed lots to which said hogs have access (which yards, corrals, sheds or feed lots must not be adjoining a public highway) must be quarantined for a period of not less than thirty days. Conspicuous notice of quarantine shall be posted upon said premises in the form of a placard bearing the words "HOG CHOLERA HERE" in letters not less than 2½ inches in size.

(d) All hogs subjected to the simultaneous method of immunization must be dipped in one of the standard recognized dips before being released from quarantine, and all yards, corrals, sheds or feed lots to which said hogs have had access must be thoroughly cleaned and disinfected. Dipping of hogs, cleaning and disinfecting of yards, corrals,

sheds or feed lots must be done under the supervision of a representative of the Live Stock Sanitary Board.

3. Veterinarians and licensed owners administrating SERUMS and VIRUS shall immediately render full reports to the State Veterinary Surgeon, giving names and addresses of owners and number of hogs treated.

October 1, 1914.

Order No. 10.

Official Tuberculin Tests.

1. In the subcutaneous tuberculin test not less than three ante-temperatures at intervals of not more than four hours and not less than two hours, and not less than four post-temperatures beginning at not less than six hours and not more than ten hours after injection, at intervals of not less than two hours and not more than three hours, must be taken by the deputy state veterinary surgeon making the test. In all tests the taking of post temperatures must be carried out until the twentieth hour, at which time, if there is no tendency for the temperature to rise, the test may cease.

2. The intra-dermal test is hereby adopted as an official test for tuberculosis in cattle.

In the intra-dermal tuberculin test the injection must be made in the caudal folds or some such suitable place. The injection must be made intra-dermally. The post-inspection should be made between the sixtieth and seventy-second hour.

September 24, 1916.

Order No. 11.

Certificates from Illinois.

The order issued January 22, 1912, by the Montana Livestock Sanitary Board prohibiting the importation of live stock into the State of Montana from the State of Illinois, unless accompanied by a certificate issued by a veterinary inspector in the employ of the United States Bureau of Animal Industry, is hereby rescinded.

On and after October 1, 1914, the Livestock Sanitary Board of Montana will accept shipments from Illinois ac-

accompanied by either Federal certificates or certificates issued by recognized veterinarians indorsed and approved by the Livestock Sanitary Board of Illinois.

Order No. 12.

Ft. Belknap Quarantine.

It having been brought to the attention of the Live Stock Sanitary Board that dourine exists on the Fort Belknap Reservation in the State of Montana:

NOW, THEREFORE, by order of the Live Stock Sanitary Board of the State of Montana the territory known as the Fort Belknap Reservation in the State of Montana is hereby quarantined on account of dourine.

It is further ordered that no mares or stallions of any description shall be shipped out of the Fort Belknap Reservation until they have been blood tested for dourine and passed by either a representative of the United States Bureau of Animal Industry or the Live Stock Sanitary Board of Montana.

This order does not restrict the movement of live stock other than mares and stallions.

January 15, 1915.

Order No. 13.

Prohibiting Importation of Virus.

By order of the Montana Live Stock Sanitary Board hog cholera VIRUS shall not be imported into the State of Montana or sold, used, or given away, within the State of Montana, unless upon written permit issued by the State Veterinary Surgeon at Helena, Montana.

Hogs within the State of Montana, shall not be double vaccinated unless upon written permit issued by the State Veterinary Surgeon at Helena, Montana, and under the personal supervision of a representative of the Montana Live Stock Sanitary Board.

The use of hog cholera SERUM is not restricted by this order, but all hog cholera SERUM imported into, sold, used, or given away within the State of Montana, must be manufactured under a license issued by the United States Bureau of Animal Industry.

September 28, 1915.

Order No. 16.**Certificates Accompanying Shipments of Cattle from Wisconsin and New York.**

In accordance with Section 1888, Revised Codes of Montana, 1907, the following regulation is hereby established by the Live Stock Sanitary Board, to govern the admission into the State of Montana, of cattle that originated in the States of Wisconsin and New York.

All cattle of any class that originate in the State of Wisconsin or New York destined to the State of Montana must be accompanied by a certificate of health issued by a veterinary inspector of the United States Bureau of Animal Industry, the inspection to be made in accordance with the regulations of the Live Stock Sanitary Board and the Laws of Montana.

All cattle not accompanied by a certificate of health issued by a veterinary inspector of the United States Bureau of Animal Industry must be held at the state line and be inspected by an inspector of the United States Bureau of Animal Industry or an agent of the State Live Stock Sanitary Board, the expenses of said inspection to be paid by the owner of the stock.

This regulation to take effect July 15th, 1915.

Order No. 17.**Tuberculin Test of Cattle at State Fair.**

IT IS HEREBY ORDERED that all cattle exhibited, offered for sale, or in any way using the Montana State Fair premises during the progress of the annual State Fair, must have passed a satisfactory tuberculin test not more than one year previous to their being exhibited.

Official tuberculin test will be made free of charge upon application to the State Veterinary Surgeon at Helena, Montana.

September 27, 1915.

Order No. 18.

Certificates from South Dakota.

Order No. 3, issued September 23, 1913, prohibiting the importation of live stock into the State of Montana from the State of South Dakota unless accompanied by a certificate issued by a Veterinary Inspector of the United State Bureau of Animal Industry or a veterinarian approved by the United States Bureau of Animal Industry for Canadian mallein testing, is hereby rescinded.

On and after March 20, 1916, the Live Stock Sanitary Board of Montana will accept shipments of live stock from South Dakota accompanied by either a Federal certificate or a certificate issued by an officially certified graduate veterinarian of South Dakota.

March 15, 1916.

Order No. 20.

Regulation Providing for the Admission of Cattle from Official Accredited Tuberculosis Free Herds:

IT IS HEREBY ORDERED by the Live Stock Sanitary Board of Montana that all cattle from official accredited tuberculosis free herd may be shipped into the State of Montana without a tuberculin test chart.

PROVIDED the shipment is accompanied by a statement from the live stock sanitary board, or United States Bureau of Animal Industry, and owner or agent of cattle, that they are from an official accredited tuberculosis free herd and are free from symptoms of any contagious infectious disease and

PROVIDED FURTHER that they have been tuberculin tested not longer than nine (9) months previous to date of shipment.

June 7, 1916.

Order No. 25.

Regulations Governing the Importation of Live Stock and Dogs into the State of Montana, as Amended April 1, 1918.

In Compliance with Chap. 157 Session Laws 1917.

Horses—Mules—Asses.

Health certificates including mallein test. Horses, mules and asses may be shipped in without inspection to quarantine yards at Miles City, Dillon or Billings, providing the waybills bear the notation "CONSIGNMENT TO QUARANTINE YARDS AT MONTANA." Animals so shipped will be inspected and tested at owner's expense by a representative of the Montana Live Stock Sanitary Board before released from quarantine yards. Wild, unbroken range (but not pasture) horses, mules or asses may be shipped into Montana on a clinical health certificate providing each individual animal is given a clinical chute inspection.

Animals for temporary racing, exhibition or speed purposes may be shipped in on clinical health certificate.

Stallions or Jacks.

In addition to mallein test a certificate of soundness, original of which must accompany shipment, a copy mailed to Stallion Registration Board at Bozeman, Montana, at least ten days before the importation of stallion or jack into the State. No stallion or jack which is neither pure bred nor grade shall be imported into the State of Montana for breeding purposes. A "grade" is defined as an animal whose sire or dam, but not both, is a registered pure bred animal.

Cattle.

All cattle over six months of age (breeding cattle, spayed heifers and steers) brought into the State of Montana must be accompanied by a tuberculin test chart issued by an officially certified graduate veterinarian.

EXCEPTING that strictly range cattle shipped directly from the range sections of Arizona, California, Colorado, Idaho, New Mexico, Nevada, Oklahoma, Oregon, Texas, Utah, Washington, Wyoming, North and South Dakota west of the Missouri River, Kansas and Nebraska west of the 100th Meridian, Alberta, Saskatchewan and British Columbia need not be accompanied by a tuberculin test chart but must be accompanied by a clinical health certificate issued by an officially certified graduate veterinarian.

All bulls from any state or territory, Canada or Mexico must be accompanied by an official tuberculin test chart.

All pure bred cattle shipped into the State of Montana from other than FEDERAL OR STATE OFFICIALLY AC-

CREDITED TUBERCULOSIS FREE HERDS must be shipped into quarantine and held for an official tuberculin retest not less than sixty days after their arrival. This retest will be made free of charge.

Cattle from a public sale yard, with the exception of range cattle certified by the Federal Inspector in Charge as coming directly from the above designated range sections, must be accompanied by a Federal tuberculin test chart.

Cattle, with the exception of cattle from FEDERAL OR STATE OFFICIALLY ACCREDITED TUBERCULOSIS FREE HERDS, from New York and Wisconsin must be accompanied by a Federal tuberculin test chart.

Cattle from FEDERAL OR STATE OFFICIALLY ACCREDITED TUBERCULOSIS FREE HERDS may be shipped into Montana without a tuberculin test chart when accompanied by a statement from the Live Stock Sanitary Board or United States Bureau of Animal Industry, and owner or agent of cattle, that the cattle shipped are from an officially accredited tuberculosis free herd which has been tested not longer than nine (9) months previous to date of shipment, and are free from symptoms of any infectious-contagious disease.

Calves from other than strictly range cows from above excepted area must be accompanied by an official clinical health certificate stating that they are from cows, which have been tuberculin tested and found free from tuberculosis.

Cattle for immediate slaughter (NOT LONGER THAN SEVEN DAYS AFTER ARRIVAL AT DESTINATION) may be shipped into Montana without a health certificate if accompanied by a statement from owner or agent that animals are for immediate slaughter and will be slaughtered within seven days after arrival at destination.

Swine.

Swine for breeding or feeding purposes must be accompanied by a health certificate, stating that the animals are free from any infectious contagious disease and that they do not come from a public stock yard or a district in which hog cholera has existed during the past three months; and provided that the animals have not been subjected to the SERUM AND VIRUS treatment within 30 days immediately prior to date of shipment.

Swine may be shipped from a district where hog cholera has existed during the past three months provided they have been properly immunized by the use of anti-hog-cholera serum ONLY within 15 days of shipment or have been subjected to the SERUM AND VIRUS treatment not less than 30 days previous to date of shipment; and provided further that they have been kept on a premise or farm on which hog cholera has not existed for the past three months; provided further that they have been properly dipped just previous to their shipment in a solution recognized by the U. S. Bureau of Animal Industry.

SWINE FOR SLAUGHTER. Health certificate or statement by the shipper or owner that they will be shipped direct to an abattoir and slaughtered within 7 days after arrival at destination.

PURE BRED SWINE. Pure bred swine transported in crates by express will be admitted into the State of Montana when accompanied by an affidavit of the owner or his agent (countersigned by the State Veterinarian) to the effect that said swine, to the best of his knowledge and belief, are not affected with hog cholera or any other communicable disease and that hog cholera has not existed upon the premise from which said swine have been removed for a period of not less than three months immediately prior to date of shipment. Also that said swine have not been subjected to the SERUM AND VIRUS treatment within 30 days immediately prior to date of shipment.

SWINE FOR EXHIBITION. All swine to be exhibited in Montana at state or county fairs must be accompanied by health certificate stating that they are free from any symptoms of an infectious contagious disease and that they have been properly immunized with the use of anti-hog-cholera serum ONLY within 15 days of shipment, or that they were subjected to the SERUM AND VIRUS treatment not less than 30 days immediately prior to date of shipment.

All swine, excepting for immediate slaughter, shipped into Montana must be loaded thru clean and disinfected pens and chutes into disinfected cars and must not be unloaded at any public stock yard unless the stock yard has been specially disinfected for that purpose.

A duplicate health certificate, statement or affidavit must be forwarded to the State Veterinary Surgeon at Helena.

The effect of this amendment is to permit the entry of swine into Montana that have been immunized with anti-hog-cholera serum ONLY within 15 days of shipment and not less than 30 days after double vaccination; also to provide for the shipment of swine from a district where hog cholera has existed during the past three months if properly immunized and dipped; also to provide for the importation of pure bred swine shipped in crates by express when accompanied by owner's affidavit.

Sheep.

Health certificate and shipped in disinfected cars. Sheep for grazing purposes, or feeding, must be inspected upon their arrival at railroad destination in Montana by a Montana Inspector, and quarantined for ninety days on land owned, leased, or controlled by the owner of the sheep. Bucks and ewes for dissemination to other bands for breeding purposes shall be dipped twice with an interval of ten days under the supervision of a Montana Inspector and quarantined for at least ninety days on land owned, leased or controlled by the owner. In all sheep shipments five days notice must be given the State Veterinary Surgeon's office at Helena before the arrival of the sheep in Montana. Inspection and supervision of dipping free of charge.

Disinfection of Cars.

Disinfection of cars does not apply to box-cars which have not been previously used for stock shipments.

Dogs.

All dogs originating in any state or territory of the United States, the District of Columbia, the Dominion of Canada or the Republic of Mexico must be accompanied by a statement from the state or government health officer, or the state veterinarian, that rabies has not existed for the past nine months within a radius of fifty miles of origin of the shipments and also by a statement from the owner or agent of the animal that the dog or dogs are to the best of his knowledge free from disease and have since birth, or during the past nine months been at all times within the

radius designated by the official health officer or state veterinarian. A copy of these statements must be forwarded to the State Veterinary Surgeon at Helena, Montana.

Dogs which cannot comply with this regulation must be accompanied by a permit from the State Veterinary Surgeon at Helena, Montana.

This regulation does not apply to performing animals for temporary stay in Montana.

Hog Cholera Serum.

All anti-hog-cholera serum sold within the State of Montana, or imported into the State for sale, distribution or use, shall be produced under license granted by the United States Department of Agriculture, Bureau of Animal Industry.

Hog Cholera Virus.

All serum manufacturers are hereby prohibited from shipping any virulent blood or hog cholera virus into the State of Montana; unless written permission to do so is granted by the State Veterinary Surgeon.

Certificates.

Health certificates and test charts are good for thirty days. The original certificate must accompany shipment to its destination and duplicate immediately forwarded by the veterinarian making the inspection or test to the State Veterinary Surgeon, Helena, Montana.

Who May Inspect.

Federal, State, Graduate Deputy State Veterinarians, or Graduate veterinarians approved by their State Veterinarian or Live Stock Sanitary Board.

This Order to take effect May 1, 1917.

ORDER NO. 26.

Agreement for the Tuberculin Testing of Herds of Pure-Bred Cattle.

WHEREAS, the Montana Live Stock Sanitary Board, for the purpose of improving the pure-bred dairy and beef breeds of cattle in Montana, encouraging recognition of the importance of maintaining herds of such cattle free from tuberculosis, and promoting the interchange of healthy pure-

bred cattle, proposes, so far as available funds permit, to co-operate with the breeders of pure-bred cattle by assisting them to eradicate tuberculosis from their herds and maintain them free from that disease.

NOW, THEREFORE, in consideration of receiving assistance from the said Live Stock Sanitary Board along the lines and for the purpose specified, I,
of owner of the herd of cattle comprising

..... do hereby agree to cooperate with the said Board upon the following terms:

I will permit my entire herd, or any cattle of my herd, to be tuberculin tested or retested at such times as are considered necessary by the Live Stock Sanitary Board.

I will not present any cattle for the tuberculin test which have been injected with tuberculin within two months immediately preceding, or which have at any time reacted to a tuberculin test.

I will present, prior to each test, to the inspector of said Board, certificates of registration for each pure bred and registered animal offered by me to the tuberculin test, such certificates to be accepted as identification of the animals offered. Any grade females maintained in the herd, or associated with animals of the herd, must be identified by a tag or other marking satisfactory to the Live Stock Sanitary Board.

I will report promptly to the said Live Stock Sanitary Board every transfer of cattle from my herd, giving the identification of the animal and the name and address of the person to whom transferred.

I will cause all animals which show evidence of tuberculosis of the udder or superficial glands, progressive loss of condition or emaciation, or other visible evidence of tuberculosis, to be promptly slaughtered under the United States or Montana meat-inspection regulations, and I will cause the carcasses of said animals to be disposed of according to the meat-inspection regulation of the Live Stock Sanitary Board, based upon the lesions found upon post-mortem inspection.

I will cause all animals which react to the tuberculin test, but which show no other evidence of tuberculosis, to be slaughtered and disposed of as herein provided for animals

which show also other evidence of tuberculosis, or I will cause such animals to be removed from the herd and portion of the farm upon which the healthy animals of the herd are maintained to a location approved by the Live Stock Sanitary Board, and I will cause such animals to be maintained in such form of quarantine as may be directed by the Live Stock Sanitary Board.

It is agreed that quarantine reacting bulls may be used for breeding, provided they are held upon the staff, their sexual organs properly disinfected, and the cow restrained by some suitable method so as not unnecessarily to be exposed to tuberculosis from the bull or infected premises.

I will not permit the slaughter of any tuberculous animals as indicated by physical examination or tuberculin test, except at a time and place approved by the Live Stock Sanitary Board.

I will cause, in all cases where the milk or milk products from quarantined reacting cows are to be used for any food purposes whatever, the said milk or products to be first submitted to pastuerization at not less than 140° F. for not less than 30 minutes, or to the point of active boiling; but I will not sell such milk or products in violation of any state, city, or other legislation.

I will cause the calves from quarantined reacting cows to be removed from their mothers at birth, to be maintained upon premises free from infection with tuberculosis, and to be fed upon the milk of cows which have passed a satisfactory tuberculin test or upon pasteurized or boiled milk of tuberculin reactors.

I will allow no cattle to be associated with my herd which have not passed a tuberculin test approved by the Live Stock Sanitary Board. I will keep all new cattle separated from my herd pending the approval of the tuberculin test or the application of a tuberculin test by an inspector of the Live Stock Sanitary Board. I will notify the Live Stock Sanitary Board immediately, giving details of the identification characteristics and records of tuberculin test of any cattle which may be added to my herd.

I will surrender any premises contaminated by tuberculous animals, as indicated by a physical examination or a tuberculin test, to a thorough cleaning and disinfection, at my expense, under the direction or supervision of the Live

Stock Sanitary Board. I will comply with all reasonable sanitary measures and other recommendations by the Live Stock Sanitary Board for the control of tuberculosis.

Violation of the letter or spirit of this agreement by me shall be considered sufficient cause for the immediate cancellation of this agreement and the withdrawal of cooperation by the Live Stock Sanitary Board.

IN WITNESS WHEREOF, I have signed this agreement this day of, one thousand nine hundred and

..... Owner of the herd.

Address

Witness:

Order No. 27.

Official Charges for Interstate Inspections.

The following official charges for interstate inspection of livestock have been adopted by the Live Stock Sanitary Board:

Sheep, physical inspection, \$8.00 per day and expenses.

Cattle, physical inspection, \$8.00 per day and expenses.

Swine, physical inspection, \$8.00 per day and expenses.

(If inspection is made in resident city of veterinarian making inspection, three cars or under shall be classified as one-half day.)

Swine, immunization, \$.25 per head. Owner to furnish serum, help, and incidental materials.

Horses, physical inspection, \$2.50 per car and expenses.
(Minimum charge \$5.00.)

Horses, Mallein testing:

When test is made in locality other than resident city of veterinarian conducting test, \$1.00 per head and all necessary expenses with a minimum charge of \$15.00.

When test is made in resident city of veterinarian conducting the test, the charge will be \$1.00 per head and expenses with a minimum charge of \$5.00.

Tuberculin Testing:

The charge for tuberculin testing will be the same as for mallein testing.

Mallein and Tuberculin testing in mixed shipments will be charged for as one test.

When two or more inspections are made at different points in one day, two days may be charged.

Disinfecting stock cars: \$8.00 per diem and expenses.

Helena, Montana, July 5, 1917.

Order No. 28.

Brands Owned by the Live Stock Sanitary Board; Use for Each Brand:

G { Cattle, on left side of neck.
Sheep, on left side of nose.
To be used for any acute contagious disease not covered by brands given below.

C { Horses, on left jaw.
For reactors to the blood test for dourine and clinical cases of dourine.

G { Horses on right jaw. For reactors to mallein test and clinical cases of glanders.

T { Cattle, on right jaw. For reactors to tuberculin test and clinical cases of tuberculosis.

S { Red Paint brand for sheep on right side. To be used on sheep quarantined for any purpose.

Helena, Montana, July 5, 1917.

The territory known as the Flowerree Sheep and Horse Company range, north of the Sun River, and all territory known as the Flowerree Sheep and Horse Company range on the Marias River, continue in quarantine on account of sheep scab.

The effect of this Order is to release all territory quarantined on account of sheep scab with the exception of the range and territory owned and controlled by the Flowerree Sheep and Horse Company.

Dated July 5, 1917.

Order No. 32.

Cattle Quarantine Notice—Blackfeet Indian Reservation.

It having been ascertained that cattle on the Blackfeet Indian Reservation are affected with scabies and acting under authority of Chapter 157, Session Laws 1917, it is hereby ordered by the Montana Live Stock Sanitary Board:

1. No cattle shall be shipped or trailed from any part of the Blackfeet Indian Reservation to any place in the State of Montana unless accompanied by a certificate of health issued by a Federal veterinarian or a specially authorized representative of the Montana Live Stock Sanitary Board.

2. No cattle that are scabby or which have knowingly been exposed to scabies shall be shipped or trailed from the Blackfeet Indian Reservation to any place in the State of Montana unless dipped twice in an official solution under Federal supervision.

Dated April 5, 1918.

Order No. 33.

IT IS HEREBY ORDERED by the Montana Livestock Sanitary Board that all district deputy State veterinary surgeons shall obtain and furnish a bond in the sum of One Thousand Dollars (\$1000.00) payable to the State of Montana for the true and faithful performance of their duties.

Dated May 27, 1918.

Order No. 34.

On account of existing war conditions and the danger entailed by such requirement, the dipping of purebred rams

Order No. 29.**Marking Animals for Identification.**

In tuberculin testing cattle, each animal must be marked in such a way as to be identified without doubt at the time the post temperatures are taken, or the post observation made. Either metal tags or sheep paint—preferably blue color—must be used in identifying animals.

In testing horses for any disease the animals must be identified by branding, painting or the use of a metal tag, or minute description.

Helena, Montana, July 5, 1917.

Order No. 30.**Official Accredited Tuberculosis Free Herds.**

IT IS HEREBY ORDERED that to be eligible for classification as an Official Accredited Tuberculosis Free Herd, the animals in the herd must have passed three (3) semi-annual or two (2) annual negative official tuberculin tests.

Dated at Helena, Montana, July 5, 1917.

Order No. 30 B.**NOTICE TO HORSEMEN:**

Order No. 22, dated June 7, 1916, quarantining that territory east and south of Big Box Elder Creek in Fallon County (now Carter County) on account of dourine in horses, is hereby rescinded.

Dated July 5, 1917.

Order No. 31.

The western slope of the Jefferson National Forest Reserve; all territory lying two miles east of the road—or trail—known as the Ming Coulee Road, running south from Great Falls; all vacant pieces of land lying five miles east of the city of Great Falls, south of the Missouri River; the Fifteenth Street Bridge, thence running west one mile north and south of the main Sun River Road, to the Sun River Crossing, which were quarantined on October 16, 1916, on account of sheep scab, are hereby released from quarantine.

shipped into the State in crates by express will not be considered compulsory by the Livestock Sanitary Board, provided that in such cases, the rams must be quarantined for a period of not less than ninety days and must not be used or removed to other bands of sheep until the ninety-day quarantine has expired and the ram or rams have been inspected and found free from disease by a representative of the Montana Livestock Sanitary Board.

Dated September 11, 1918.

Order No. 35.

Where rams are shipped into the State of Montana for sale, they may be quarantined on the ranch or ranches of individual owners after they have been dipped twice and branded with a red letter "S" under official supervision, provided that in the quarantine of such rams in more than one place, they will not be turned in with sheep allowed to run on the open range, and will not be permitted to cross or in any way graze upon the range of native sheep until after the ninety-day quarantine period has expired, and until they have been inspected and found free from disease, and released by a representative of the Montana Live Stock Sanitary Board; and provided further, that the inspection of rams so quarantined on individual ranches will not entail an additional expense upon the part of the Montana Live Stock Sanitary Board.

Dated September 11, 1918.

SUMMARY.

Investigations Synoptically Arranged.

1917.

HORSES

Dourine—1917.

Total Number of horses blood tested	9,435
Number reacting to test	340
Reactors in quarantine from 1916	62
	—
	402
Reactors destroyed and castrated during 1917.....	333
	—
Reactors Remaining in quarantine	69
Percentage of reactors for 1917.....	3.6%

Glanders—1917.

Total Number horses mallein tested	1,485
Number reacting to the test	79
Reactors destroyed in 1917	77
	—
Reactors remaining in quarantine	2
Percentage of reactors for 1917.....	5.3%

Miscellaneous Inspections—1917.

Number of horses inspected for various diseases.....	1,188
Number of horses inspected for scabies.....	87

Importation Inspections—1917.

Numer of horses mallein tested at destination.....	1,605
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Inspections for Interstate Shipment—1917.

Numer horses mallein tested for shipment.....	3,871
Number horses clinically inspected	2,024
	—
Number of horses inspected for Forest Reserve.....	5,788

TOTAL NUMBER OF HORSES INSPECTED DURING 1917..... 25,483

CATTLE.

Tuberculosis—1917.

Number dairy cattle tested for tuberculosis	13,526
Number cattle reacting to test	706
Reactors in quarantine from 1916	54
	—
Reactors destroyed during 1917	760
	—
Reactors remaining in quarantine	752
	—
Percentage of reactors	5.2%

Tests for Accredited Tuberculosis Free Herds—1917.

Number of purebred cattle tested by Federal Veterinarian for Accredited Herds, 1917	255
Number cattle reacting to test	1

Inspections for Cattle Scabies—1917.

Number of cattle inspected for scabies	36,170
Number of cattle dipped for scabies	23,775

Miscellaneous Diseases—1917.

Number of cattle inspected for various diseases	9,894
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Importation Inspections—1917.

Number of cattle tested on arrival in State, including 60 day retests of purebred cattle	1,808
Number of reactors	10
Number destroyed	2
Reactors remaining in quarantine	8

Inspections for Interstate Shipment—1917.

Number of cattle tested for shipment	792
Number of cattle clinically inspected	14,446
	15,238
Number of cattle inspected for Forest Reserves	75,436

TOTAL NUMBER OF CATTLE INSPECTED DURING 1917..... 152,327

Blackleg Vaccine Distributed—1917.

Total number of applications filled	1,666
Total number doses of blackleg vaccine distributed.....	146,295

SHEEP.**Sheep Scabies—1917.**

Total number of sheep inspected for scabies, 1917, including inspections of imported sheep.....	309,322
Number of sheep dipped during 1917	130,639

Miscellaneous Diseases—1917.

Number sheep inspected for various diseases	10,967
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Inspections for Interstate Shipments.

Number of sheep inspected for shipment	302,950
Number of sheep inspected for Forest Reserves	213,677
TOTAL NUMBER OF SHEEP INSPECTED DURING 1917..... 967,555	

SWINE.

Total number hogs inspected for hog cholera and other diseases	1,727
Total number hogs inspected for Interstate Shipment.....	4,510
TOTAL NUMBER HOGS INSPECTED 1917	6,237

GOATS.

Number of Goats inspected for Interstate shipment.....	24
Number of dogs inspected for Interstate shipment	46

TOTAL NUMBER OF ANIMALS INSPECTED DURING 1917.....1,151,672

Investigations Synoptically Arranged.

1918.

HORSES.

Dourine—1918.

Total Number of horses blood tested	9,763
Number reacting to test	324
Rcactors in quarantine from 1917	69
	393
Reactors destroyed and castrated during 1918.....	336
Reactors remaining in quarantine	57
Percentage of reactors for 1918	3.3%

Glanders—1918.

Total Number horses mallein tested	840
Number reacting to the test	36
Reactors in quarantine from 1917	2
	38
Reactors destroyed in 1918.....	38
Percentage of reactors for 1918	4.3%

Miscellaneous Inspections—1918.

Number of horses inspected for various diseases	2,020
Number of horses dipped for scabies	496

Importation Inspections—1918.

Number of horses mallein tested and clinically inspected at destination	877
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Inspections for Interstate Shipment.

Number of horses mallein tested for shipment.....	4,779
Number of horses clinically inspected for shipment	2,807

TOTAL NUMBER OF HORSES INSPECTED IN 1918.....21,582

CATTLE.

Tuberculosis—1918.

Number dairy cattle tested for tuberculosis	18,509
Number cattle reacting to test	990
Reactors in quarantine from 1917	8
	998
Reactors destroyed during 1918	994
	4
Reactors remaining in quarantine	4
Percentage of reactors for 1918.....	5.3%

Tests for Accredited Tuberculosis Free Herds—1918

Number of purebred cattle tested by Federal and State Inspectors for Accredited Herds	4,211
Number cattle reacting to test	161
Reactors in quarantine from 1917	1
	162
Reactors destroyed during 1918	156
	6
Reactors remaining in quarantine	6
Percentage of purebred cattle reacting to test 3.8%	

Sixty-Day Retests of Purebred Cattle and Dairy Cattle Shipped on Unsatisfactory Charts.

Number of purebred and dairy cattle retested after 60 days in state	652
Number of reactors	16
Reactors in quarantine from 1917	8
	24
Reactors destroyed	12
Reactors reshipped to former owners.....	10
	22
Reactors remaining in quarantine	2
Percentage of imported cattle reacting, after 60 day retest	2.4%
Total number of purebred and dairy cattle tested for tuberculosis in 1918	23,372
Total number of reactors	1,167
Total number reactors in quarantine from 1917.....	17
	1,184
Total number destroyed	1,162
Returned to former owners	10
	1,172
Total number of reactors remaining in quarantine....	12

Inspections for Cattle Scabies—1918.

Number of cattle inspected for scabies.....	16,866
Number of cattle inspected and dipped	21,706
Number of cattle dipped by Federal Inspectors on Reservations	136,014
Total number of cattle inspected for scabies.....	174,586

Miscellaneous Inspections—1918.

Number cattle inspected for various diseases	14,424
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Importation Inspections—1918.

Number of cattle tested at destination	421
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Number of cattle clinically inspected upon arrival in State.....	4,397
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Inspections for Interstate Shipment—1918.

Number of cattle tested for shipment.....	1,172
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Number of cattle clinically inspected for shipment.....	15,432
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TOTAL NUMBER OF CATTLE INSPECTED IN 1918.....	233,804
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Blackleg Vaccine Distributed—1918.

Total number of applications filled.....	1,492
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Total number doses of blackleg vaccine distributed.....	139,255
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SHEEP.

Number of sheep inspected for scabies.....	271,438
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Number dipped for scabies	28,645
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TOTAL NUMBER OF SHEEP INSPECTED IN 1918	300,083
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Miscellaneous Inspections—1918.

Number of sheep inspected for various diseases	22,707
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Importations—1918.

Number of sheep inspected and quarantined.....	214,204
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Number of imported sheep dipped and quarantined.....	55,630
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269,834

Inspections for Interstate Shipment—1918.

Number of sheep inspected for shipment	274,592
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TOTAL NUMBER OF SHEEP INSPECTED IN 1918	867,216
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SWINE.

Inspections—1918.

Number of swine inspected for various diseases, including hog cholera	2,548
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Number of swine inspected for Interstate Shipment.....	4,137
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Number inspected and immunized on arrival in state.....	11
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TOTAL NUMBER OF SWINE INSPECTED 1918.....	6,696
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GOATS.

Number of Goats inspected for Interstate Shipment.....	18
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DOGS.

Number of dogs inspected for various diseases.....	4
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Number of dogs inspected for Interstate Shipment.....	189
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Number of dogs inspected on arrival in state.....	32
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TOTAL NUMBER OF DOGS INSPECTED	225
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Number of Cats inspected for shipment	6
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CHICKENS.

Number of chickens tested for tuberculosis and destroyed.....	128
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TOTAL NUMBER OF ANIMALS INSPECTED IN 1918.....	1,129,675
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IMPORTATIONS—1917-1918.

TOTAL NUMBER AND VALUATION OF HORSES, CATTLE, SHEEP AND SWINE AS ASSESSED IN MONTANA—1918.

